

PUBLIC NOTICE

Meridian Brick LLC - Gleason Plant has applied to the Tennessee Air Pollution Control Division (TAPCD) for renewal of a major source operating permit subject to the provisions of paragraph 1200-03-09-.02(11) of the Tennessee Air Pollution Control Regulations (also frequently referred to as Title V regulations). A major source (Title V) operating permit is required by both the Federal Clean Air Act and the Tennessee Air Pollution Control Regulations.

The applicant is Meridian Brick LLC - Gleason Plant with a site address of Old Highway 22, Gleason, TN 38229. They seek to obtain a renewal of their Title V major source operating permit for brick manufacturing.

EPA has agreed to treat this draft Part 70 permit renewal as a proposed Part 70 permit renewal and to perform its 45-day review provided by the law concurrently with the public notice period. If any substantive comments are received, EPA's 45-day review period will cease to be performed concurrently with the public notice period. EPA's 45-day review period will start once the public notice period has been completed and EPA receives notification from the Tennessee Air Pollution Control Division that comments have been received and resolved. Whether EPA's 45-day review period is performed concurrently with the public comment period or after the public comment period has ended, the deadline for citizen's petitions to the EPA Administrator will be determined as if EPA's 45-day review period is performed after the public comment period has ended (i.e., sequentially).

The status regarding EPA's 45-day review of this project and the deadline for submitting a citizen's petition can be found at the following website address:

<http://www.epa.gov/caa-permitting/tennessee-proposed-title-v-permits>

A copy of the application materials used by the TAPCD and a copy of the draft permit are available for public inspection during normal business hours at the following locations:

Gleason Memorial Library
105 College Street
Gleason, TN 37091
Judy Pashall, Director

and

Tennessee Department of Environment and Conservation
Division of Air Pollution Control
William R. Snodgrass Tennessee Tower
312 Rosa L. Parks Avenue, 15th Floor
Nashville, Tennessee 37243

Also, if you require a copy of the draft permit it is available electronically by accessing the TDEC internet site located at:

<http://www.tn.gov/environment/topic/ppo-air>

Interested parties are invited to review these materials and comment. In addition, a public hearing may be requested at which written or oral presentations may be made. To be considered, written comments or requests for a public hearing must be made within thirty (30) days of the date of this notice and should be addressed to **Michelle Owenby, Director, Air Pollution Control Division, William R. Snodgrass Tennessee Tower, 312 Rosa L. Parks Avenue, 15th Floor, Nashville, Tennessee 37243**. Questions concerning the source may be addressed to Mr. Jerry Swinea at the same address or by calling 1-(615)-532-0554 or (615) 532-0639. A final determination will be made after weighing all relevant comments.

Individuals with disabilities who wish to participate in these proceedings (or to review these filings) should contact the Tennessee Department of Environment and Conservation to discuss any auxiliary aids or services needed to facilitate such participation. Such contact may be in person, by writing, telephone, or other means, and should be made no less than ten days prior to the end of the thirty (30) day public comment period to allow time to provide such aid or service. Contact the Tennessee Department of Environment and Conservation ADA Coordinator, William R. Snodgrass Tennessee Tower, 312 Rosa L. Parks Avenue, 2nd Floor, Nashville, Tennessee 37243, 1 (866) 253-5827. Hearing impaired callers may use the Tennessee Relay Service, 1 (800) 848-0298.

(Do Not Publish Text Below The Dotted Line.)

For the “*Weakley County Press*” - publish once during the time period of February 1, 2018 through February 8, 2018

Air Pollution Control

Date: January 29, 2017

Assigned to – Jerry Swinea

No alterations to the above are allowed:

Meridian Brick LLC must pay to place this advertisement in the newspaper.

Air Pollution Control must be furnished with an affidavit from the newspaper stating that the ad was run and the date of the ad or one complete sheet from the newspaper showing this advertisement, the name of the newspaper and the date of publication. Mail to Jerry Swinea Air Pollution Control Division, William R. Snodgrass Tennessee Tower, 312 Rosa L. Parks Avenue, 15th Floor, Nashville, Tennessee 37243.

TITLE V PERMIT STATEMENT OF BASIS

Facility Name: Meridian Bricks, LLC. - Gleason Plant
City: Gleason
County: Weakley

Date Application and Revisions Received: October 13, 2016
Date Application Deemed Complete: October 13, 2016

Emission Source Reference No.: 92-0052
Permit No.: 572182

INTRODUCTION

This narrative is being provided to assist the reader in understanding the content of the attached Title V operating permit.

This Title V Permit Statement is written pursuant to Tennessee Air Pollution Control Rule 1200-03-09-.02(11)(f)1.(v).

The primary purpose of the Title V operating permit is to consolidate and identify existing state and federal air requirements applicable to **Meridian Bricks, LLC. – Gleason Plant** and to provide practical methods for determining compliance with these requirements. The following narrative is designed to accompany the Title V Operating Permit. It initially describes the facility receiving the permit, then the applicable requirements and their significance, and finally the compliance status with those applicable requirements. This narrative is intended only as an adjunct for the reviewer and has no legal standing. Any revisions made to the permit in response to comments received during the public participation process will be described in an addendum to this narrative.

Acronyms

PSD - Prevention of Significant Deterioration

NESHAP - National Emission Standards for Hazardous Air Pollutants

NSPS - New Source Performance Standards

MACT - Maximum Achievable Control Technology

NSR - New Source Review

I. Identification Information

A. Source Description

01: This source is comprised of a clay grinding operation; **02:** This source is comprised of a natural gas fired tunnel kiln #1 with a maximum production rate of 9.82 tons of fired brick per hour. The exhaust from the kiln exits through a stack at 8835 DSCFM with no controls and **03:** This source is comprised of a natural gas fired tunnel kiln #2 with a maximum production rate of 9.82 tons of fired brick per hour. The exhaust from the kiln exits through a stack at 8835 DSCFM with no controls. Tennessee Air Pollution Control Construction Permits #962273P and #963477P were referenced in the creation of the Title V Renewal Operating Permit.

B. Facility Classification

1. Attainment or Non-Attainment Area Location

Area *is* designated as an attainment area for all criteria pollutants.

2. Company is located in a *Class II* area.

C. Regulatory Status

1. PSD/NSR

This facility *is not* a major source under PSD.

2. Title V Major Source Status by Pollutant

Pollutant	Is the pollutant emitted?	If emitted, what is the facility's status?	
		Major Source Status	Non-Major Source Status
PM	Yes	Yes	No
PM ₁₀	Yes	No	Yes
SO ₂	Yes	Yes	No
VOC	Yes	No	Yes
NO _x	Yes	No	Yes
CO	Yes	No	Yes
Individual HAP	Yes	Yes	No
Total HAPs	Yes	Yes	No
CO ₂ (e)	Yes	No	No

3. MACT Standards

A case-by-case MACT study based on the provisions of 40 CFR part 63, subpart JJJJJ (*new and existing brick & structural clay products (BSCP)*) indicated that no control is required for Kiln production capacity of less than 10 tons per hour (TPH) of fired brick according to this MACT Rule. If any future MACT Rule revision/changes or any new requirements become effective, a source shall be required to meet any new applicable Federal requirements.

4. Program Applicability

Are the following programs applicable to the facility?

PSD *no*

NESHAP *yes 40 CFR Subpart JJJJ*

NSPS *no*

II. Compliance Information

A. Compliance Status

Is the facility currently in compliance with all applicable requirements? *yes*

If no, explain.

Are there any applicable requirements that will become effective during the permit term? *Yes*

If yes, explain – Is currently under a new promulgated Rule – 40 CFR Part 63 Subpart JJJJ for brick kilns less than 10 tons per hour capacity.

III. Other Requirements

A. Emissions Trading

The facility is not involved in an emission trading program.

B. Acid Rain Requirements

This facility is not subject to any requirements in Title IV of the Clean Air Act.

C. Prevention of Accidental Releases

Not Applicable

D. Greenhouse Gas (GHG): This facility is not a major source of GHG emissions with less than 100,000 tons/year of carbon dioxide equivalent (CO₂e) tonnage.

Title V Permit Statement

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IV. Public Participation Procedures

Notification of this draft permit was mailed to the following environmental agencies:

1. EPA Region IV
2. Kentucky Department of Environmental Protection
3. Missouri Department of Natural Resources

V. Permit History / Modification since Last Title V Permit Issuance

1. An Administrative Amendment #1 to Title V permit 561519 was issued on May 8, 2013 for changes in RO (Responsible Official).

2. MINOR MODIFICATION #1 FOR BORAL BRICKS – GLEASON PLANT; 92-0052

This is a minor permit modification to the Title V Permit 561519, as stated under 1200-3-9-.02(11) (f) 5 (ii) of the Tennessee Air Pollution Control Regulations. This is not a modification under Title I of the Federal Act. The following brief description outlines the changes to the Title V permit and specific conditions for this modification.

Boral Bricks Inc. – Gleason Plant has made revisions to their Title V permit and the applications and letters were received by the Division on November 19, 2015 (with additional information received on July 5, 2016) and letters dated July 8, 2015, and October 21, 2015. The Minor Modification #1 to their Title V Air Emissions Permit consisting of the following proposed changes to their process operation:

63-0092: The permittee removed three Biomass Gasification Units from the facility. Also, changes in Responsible Official and facility contact person.

92-0052-02 and 03: The permittee has proposed to remove Syn gas as a potential fuel for the two kilns (sources 02 & 03) and removal of gasification equipment (all three gasification units). Consequently, all permit conditions related to gasification units have been modified or deleted are as follows: a) conditions E5-2, E5-3, E5-7, E5-8, E6-2, E6-3, E6-7 & E6-8 have been deleted; b) conditions E5-1 (MM1), E5-2 (MM1), E5-4 (MM1), E5-8 (MM1), E6-1 (MM1), E6-2 (MM1), E6-4 (MM1) & E6-8 (MM1) have been modified (Conditions for sources 02 and 03 have been re-numbered for continuity).

Addition of new condition E3-7(MM1) was added to recognize a new responsible official and a new facility contact person.

**TENNESSEE AIR POLLUTION CONTROL BOARD
DEPARTMENT OF ENVIRONMENT AND CONSERVATION
NASHVILLE, TENNESSEE 37243**



OPERATING PERMIT (TITLE V) Issued Pursuant to Tennessee Air Quality Act

This permit fulfills the requirements of Title V of the Federal Clean Air Act (42 U.S.C. 7661a-7661e) and the federal regulations promulgated thereunder at 40 CFR Part 70. (FR Vol. 57, No. 140, Tuesday, July 21, 1992 p.32295-32312). This permit is issued in accordance with the provisions of paragraph 1200-03-09-.02(11) of the Tennessee Air Pollution Control Regulations. The permittee has been granted permission to operate an air contaminant source in accordance with emissions limitations and monitoring requirements set forth herein.

Date Issued: April XX, 2018

Permit Number:
572182

Date Expires: April XX-1, 2023

Issued To:

Meridian Brick LLC - Gleason Plant

Installation Address:

Old Highway 22
Gleason, TN 38229

Installation Description:

Brick Manufacturing Facility:

Source 01: Clay grinding and raw material processing

Source 02: One (1) Tunnel Kiln (Kiln #1). Natural gas as fuel.

Source 03: One (1) Tunnel Kiln (Kiln #2). Natural gas as fuel.

NESHAP 40 CFR 63 Subpart JJJJ

Emission Source Reference No.: 92-0052

Renewal Application Due Date: Expiration Date -180 through Expiration -90 days

Primary SIC: 32

Information Relied Upon:

Application dated October 13, 2016

(continued on the next page)

DRAFT

TECHNICAL SECRETARY

No Authority is Granted by this Permit to Operate, Construct, or Maintain any Installation in Violation of any Law, Statute, Code, Ordinance, Rule, or Regulation of the State of Tennessee or any of its Political Subdivisions.

POST OR FILE AT INSTALLATION ADDRESS

CN-0827 (Rev.2-13)

RDA-1298

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ATTACHMENT 1	Opacity Matrix Decision Tree for Visible Emission Evaluation by TVEE Method 2, dated June 18, 1996 (amended September 11, 2013) and EPA Method 9.	2 pages
ATTACHMENT 2	AP-42, 5 th Edition (dated 8/97), Section 11.3 – Brick And Structural Clay Product Manufacturing, Table 11.3-1	4 pages
ATTACHMENT 3	Table 1 to Subpart JJJJJ of Part 63—Emission Limits	2 pages
ATTACHMENT 4	Table 2 to Subpart JJJJJ of Part 63—Operating Limits	1 page
ATTACHMENT 5	Table 3 to Subpart JJJJJ of Part 63— Work Practice Standards	2 pages
ATTACHMENT 6	Table 4 to Subpart JJJJJ of Part 63— Requirements for Performance Tests	4 pages
ATTACHMENT 7	Table 5 to Subpart JJJJJ of Part 63 Initial Compliance with Emission Limitations and Work Practice Standards	4 pages
ATTACHMENT 8	Table 6 to Subpart JJJJJ of Part 63 Continuous Compliance With Emission Limitations and Work Practice Standards	3 pages
ATTACHMENT 9	Table 7 to Subpart JJJJJ of Part 63— Compliance Dates	2 pages
ATTACHMENT 10	Table 8 to Subpart JJJJJ of Part 63— Deadlines for Submitting Notifications	2 pages
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SECTION A

GENERAL PERMIT CONDITIONS

A permit issued under the provisions of paragraph 1200-03-09-.02(11) is a permit issued pursuant to the requirements of Title V of the Federal Act and its implementing Federal regulations promulgated at 40 CFR, Part 70.

- A1. Definitions.** Terms not otherwise defined in the permit shall have the meaning assigned to such terms in the referenced regulation.

TAPCR 1200-03

- A2. Compliance requirement.** All terms and conditions in a permit issued pursuant to paragraph 1200-03-09-.02(11) including any provisions designed to limit a source's potential to emit, are enforceable by the Administrator and citizens under the Federal Act.

The permittee shall comply with all conditions of its permit. Except for requirements specifically designated herein as not being federally enforceable (State Only), non-compliance with the permit requirements is a violation of the Federal Act and the Tennessee Air Quality Act and is grounds for enforcement action; for a permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. Non-compliance with permit conditions specifically designated herein as not being federally enforceable (State Only) is a violation of the Tennessee Air Quality Act and may be grounds for these actions.

TAPCR 1200-03-09-.02(11)(e)2(i) and 1200-03-09-.02(11)(e)1(vi)(I)

- A3. Need to halt or reduce activity.** The need to halt or reduce activity is not a defense for noncompliance. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit. However, nothing in this item shall be construed as precluding consideration of a need to halt or reduce activity as a mitigating factor in assessing penalties for noncompliance if the health, safety or environmental impacts of halting or reducing operations would be more serious than the impacts of continuing operations.

TAPCR 1200-03-09-.02(11)(e)1(vi)(II)

- A4. The permit.** The permit may be modified, revoked, reopened, and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.

TAPCR 1200-03-09-.02(11)(e)1(vi)(III)

- A5. Property rights.** The permit does not convey any property rights of any sort, or any exclusive privilege.

TAPCR 1200-03-09-.02(11)(e)1(vi)(IV)

- A6. Submittal of requested information.** The permittee shall furnish to the Technical Secretary, within a reasonable time, any information that the Technical Secretary may request in writing to determine whether cause exists for modifying, revoking and reissuing, or termination of the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Technical Secretary copies of records required to be kept by the permit. If the permittee claims that such information is confidential, the Technical Secretary may review that claim and hold the information in protected status until such time that the Board can hear any contested proceedings regarding confidentiality disputes. If the information is desired by EPA, the permittee may mail the information directly to EPA. Any claims of confidentiality for federal purposes will be determined by EPA.

TAPCR 1200-03-09-.02(11)(e)1(vi)(V)

- A7. Severability clause.** The requirements of this permit are severable. A dispute regarding one or more requirements of this permit does not invalidate or otherwise excuse the permittee from their duty to comply with the remaining portion of the permit.
- TAPCR 1200-03-09.02(11)(e)1(v)
- A8. Fee payment.**
- (a) The permittee shall pay an annual Title V emission fee based upon the responsible official's choice of actual emissions, allowable emissions, or a combination of actual and allowable emissions; and on the responsible official's choice of annual accounting period. An emission cap of 4,000 tons per year per regulated pollutant per major source SIC Code shall apply to actual or allowable based emission fees. A Title V annual emission fee will not be charged for emissions in excess of the cap. Title V annual emission fees will not be charged for carbon monoxide or for greenhouse gas pollutants solely because they are greenhouse gases.
- (b) Title V sources shall pay allowable based emission fees until the beginning of the next annual accounting period following receipt of their initial Title V operating permit. At that time, the permittee shall begin paying their Title V fee based upon their choice of actual or allowable based fees, or mixed actual and allowable based fees. Once permitted, the Responsible Official may revise their existing fee choice by submitting a written request to the Division no later than December 31 of the annual accounting period for which the fee is due.
- (c) When paying annual Title V emission fees, the permittee shall comply with all provisions of 1200-03-26-.02 and 1200-03-09-.02(11) applicable to such fees.
- (d) Where more than one (1) allowable emission limit is applicable to a regulated pollutant, the allowable emissions for the regulated pollutants shall not be double counted. Major sources subject to the provisions of paragraph 1200-03-26-.02(9) shall apportion their emissions as follows to ensure that their fees are not double counted.
1. Sources that are subject to federally promulgated hazardous air pollutant under 40 CFR 60, 61, or 63 will place such regulated emissions in the regulated hazardous air pollutant (HAP) category.
 2. A category of miscellaneous HAPs shall be used for hazardous air pollutants listed at part 1200-03-26-.02(2)(i)12 that are not subject to federally promulgated hazardous air pollutant standards under 40 CFR 60, 61, or 63.
 3. HAPs that are also in the family of volatile organic compounds, particulate matter, or PM₁₀ shall not be placed in either the regulated HAP category or miscellaneous HAP category.
 4. Sources that are subject to a provision of chapter 1200-03-16 New Source Performance Standards (NSPS) or chapter 0400-30-39 Standards of Performance for New Stationary Sources for pollutants that are neither particulate matter, PM₁₀, sulfur dioxide (SO₂), volatile organic compounds (VOC), nitrogen oxides (NO_x), or hazardous air pollutants (HAPs) will place such regulated emissions in an NSPS pollutant category.
 5. The regulated HAP category, the miscellaneous HAP category, and the NSPS pollutant category are each subject to the 4,000 ton cap provisions of subparagraph 1200-03-26-.02(2)(i).
 6. Major sources that wish to pay annual emission fees for PM₁₀ on an allowable emission basis may do so if they have a specific PM₁₀ allowable emission standard. If a major source has a total particulate emission standard, but wishes to pay annual emission fees on an actual PM₁₀ emission basis, it may do so if the PM₁₀ actual emission levels are proven to the satisfaction of the Technical Secretary. The method to demonstrate the actual PM₁₀ emission levels must be made as part of the source's major source operating permit in advance in order to exercise this option. The PM₁₀ emissions reported under these options shall not be subject to fees under the family of particulate emissions. The 4,000 ton cap provisions of subparagraph 1200-03-26-.02(2)(i) shall also apply to PM₁₀ emissions.
- TAPCR 1200-03-26-.02 and 1200-03-09-.02(11)(e)1(vii)
- A9. Permit revision not required.** A permit revision will not be required under any approved economic incentives, marketable permits, emissions trading and other similar programs or process for changes that are provided for in the permit.
- TAPCR 1200-03-09-.02(11)(e)1(viii)
- A10. Inspection and entry.** Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Technical Secretary or his authorized representative to perform the following for the purposes of determining compliance with the permit applicable requirements:
- (a) Enter upon, at reasonable times, the permittee's premises where a source is located or emissions-related activity is conducted, or where records must be kept under the conditions of the permit;
 - (b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit;
 - (c) Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and

(d) As authorized by the Clean Air Act and Chapter 1200-03-10 of TAPCR, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.

(e) "Reasonable times" shall be considered to be customary business hours unless reasonable cause exists to suspect noncompliance with the Act, Division 1200-03 or any permit issued pursuant thereto and the Technical Secretary specifically authorizes an inspector to inspect a facility at any other time.

TAPCR 1200-03-09-.02(11)(e)3.(ii)

A11. Permit shield.

(a) Compliance with the conditions of this permit shall be deemed compliance with all applicable requirements as of the date of permit issuance, provided that:

1. Such applicable requirements are included and are specifically identified in the permit; or
2. The Technical Secretary, in acting on the permit application or revision, determines in writing that other requirements specifically identified are not applicable to the source, and the permit includes the determination or a concise summary thereof.

(b) Nothing in this permit shall alter or affect the following:

1. The provisions of section 303 of the Federal Act (emergency orders), including the authority of the Administrator under that section. Similarly, the provisions of T.C.A. §68-201-109 (emergency orders) including the authority of the Governor under the section;
2. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;
3. The applicable requirements of the acid rain program, consistent with section 408(a) of the Federal Act; or
4. The ability of EPA to obtain information from a source pursuant to section 114 of the Federal Act.

(c) Permit shield is granted to the permittee.

TAPCR 1200-03-09-.02(11)(e)6

A12. Permit renewal and expiration.

(a) An application for permit renewal must be submitted at least 180 days, but no more than 270 days prior to the expiration of this permit. Permit expiration terminates the source's right to operate unless a timely and complete renewal application has been submitted.

(b) Provided that the permittee submits a timely and complete application for permit renewal the source will not be considered to be operating without a permit until the Technical Secretary takes final action on the permit application, except as otherwise noted in paragraph 1200-03-09-.02(11).

(c) This permit, its shield provided in Condition A11, and its conditions will be extended and effective after its expiration date provided that the source has submitted a timely, complete renewal application to the Technical Secretary.

TAPCR 1200-03-09-.02(11)(f)2 and 3, 1200-03-09-.02(11)(d)1(i)(III), and 1200-03-09-.02(11)(a)2

A13. Reopening for cause.

(a) A permit shall be reopened and revised prior to the expiration of the permit under any of the circumstances listed below:

1. Additional applicable requirements under the Federal Act become applicable to the sources contained in this permit provided the permit has a remaining term of 3 or more years. Such a reopening shall be completed not later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the permit expiration date of this permit, unless the original has been extended pursuant to 1200-03-09-.02(11)(a)2.
2. Additional requirements become applicable to an affected source under the acid rain program.
3. The Technical Secretary or EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.
4. The Technical Secretary or EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements.

(b) Proceedings to reopen and issue a permit shall follow the same proceedings as apply to initial permit issuance and shall affect only those parts of the permit for which cause to reopen exists, and not the entire permit. Such reopening shall be made as expeditiously as practicable.

(c) Reopenings for cause shall not be initiated before a notice of such intent is provided to the permittee by the Technical Secretary at least 30 days in advance of the date that the permit is to be reopened except that the Technical Secretary may provide a shorter time period in the case of an emergency. An emergency shall be established by the criteria of T.C.A.

68-201-109 or other compelling reasons that public welfare is being adversely affected by the operation of a source that is in compliance with its permit requirements.

(d) If the Administrator finds that cause exists to terminate, modify, or revoke and reissue a permit as identified in A13, he is required under federal rules to notify the Technical Secretary and the permittee of such findings in writing. Upon receipt of such notification, the Technical Secretary shall investigate the matter in order to determine if he agrees or disagrees with the Administrator's findings. If he agrees with the Administrator's findings, the Technical Secretary shall conduct the reopening in the following manner:

1. The Technical Secretary shall, within 90 days after receipt of such notification, forward to EPA a proposed determination of termination, modification, or revocation and reissuance, as appropriate. If the Administrator grants additional time to secure permit applications or additional information from the permittee, the Technical Secretary shall have the additional time period added to the standard 90 day time period.
2. EPA will evaluate the Technical Secretary's proposed revisions and respond as to their evaluation.
3. If EPA agrees with the proposed revisions, the Technical Secretary shall proceed with the reopening in the same manner prescribed under Condition A13 (b) and Condition A13 (c).
4. If the Technical Secretary disagrees with either the findings or the Administrator that a permit should be reopened or an objection of the Administrator to a proposed revision to a permit submitted pursuant to Condition A13(d), he shall bring the matter to the Board at its next regularly scheduled meeting for instructions as to how he should proceed. The permittee shall be required to file a written brief expressing their position relative to the Administrator's objection and have a responsible official present at the meeting to answer questions for the Board. If the Board agrees that EPA is wrong in their demand for a permit revision, they shall instruct the Technical Secretary to conform to EPA's demand, but to issue the permit under protest preserving all rights available for litigation against EPA.

TAPCR 1200-03-09-.02(11)(f)6 and 7.

- A14. Permit transference.** An administrative permit amendment allows for a change of ownership or operational control of a source where the Technical Secretary determines that no other change in the permit is necessary, provided that the following requirements are met:
- (a) Transfer of ownership permit application is filed consistent with the provisions of 1200-03-09-.03(6), and
 - (b) written agreement containing a specific date for transfer of permit responsibility, coverage, and liability between the current and new permittee has been submitted to the Technical Secretary.

TAPCR 1200-03-09-.02(11)(f)4(i)(IV) and 1200-03-09-.03(6)

- A15. Air pollution alert.** When the Technical Secretary has declared that an air pollution alert, an air pollution warning, or an air pollution emergency exists, the permittee must follow the requirements for that episode level as outlined in TAPCR 1200-03-09-.03(1) and TAPCR 1200-03-15-.03.

- A16. Construction permit required.** Except as exempted in TAPCR 1200-03-09-.04, or excluded in subparagraph TAPCR 1200-03-02-.01(1)(aa) or subparagraph TAPCR 1200-03-02-.01(1)(cc), this facility shall not begin the construction of a new air contaminant source or the modification of an air contaminant source which may result in the discharge of air contaminants without first having applied for and received from the Technical Secretary a construction permit for the construction or modification of such air contaminant source.

TAPCR 1200-03-09-.01(1)(a)

- A17. Notification of changes.** The permittee shall notify the Technical Secretary 30 days prior to commencement of any of the following changes to an air contaminant source which would not be a modification requiring a construction permit.
- (a) change in air pollution control equipment
 - (b) change in stack height or diameter
 - (c) change in exit velocity of more than 25 percent or exit temperature of more than 15 percent based on absolute temperature.

TAPCR 1200-03-09-.02(7)

- A18. Schedule of compliance.** The permittee will comply with any applicable requirement that becomes effective during the permit term on a timely basis. If the permittee is not in compliance the permittee must submit a schedule for coming into compliance which must include a schedule of remedial measure(s), including an enforceable set of deadlines for specific actions.

TAPCR 1200-03-09-.02(11)(d)3 and 40 CFR Part 70.5(c)

A19. Title VI.

- (a) The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR, Part 82, Subpart F, except as provided for motor vehicle air conditioners (MVACs) in Subpart B:

1. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to Section 82.156.
2. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to Section 82.158.
3. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to Section 82.161.

(b) If the permittee performs a service on motor (fleet) vehicles when this service involves ozone depleting substance refrigerant in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements as specified in 40 CFR, Part 82, Subpart B, Servicing of Motor Vehicle Air Conditioners.

(c) The permittee shall be allowed to switch from any ozone-depleting substance to any alternative that is listed in the Significant New Alternatives Program (SNAP) promulgated pursuant to 40 CFR, Part 82, Subpart G, Significant New Alternatives Policy Program.

A20. 112(r). The permittee shall comply with the requirement to submit to the Administrator or designated State Agency a risk management plan, including a registration that reflects all covered processes, by June 21, 1999, if the permittee's facility is required pursuant to 40 CFR, 68, to submit such a plan.

SECTION B

GENERAL CONDITIONS for MONITORING, REPORTING, and ENFORCEMENT

- B1. Recordkeeping.** Monitoring and related record keeping shall be performed in accordance with the requirements specified in the permit conditions for each individual permit unit. In no case shall reports of any required monitoring and record keeping be submitted less frequently than every six months.
- (a) Where applicable, records of required monitoring information include the following:
1. The date, place as defined in the permit, and time of sampling or measurements;
 2. The date(s) analyses were performed;
 3. The company or entity that performed the analysis;
 4. The analytical techniques or methods used;
 5. The results of such analyses; and
 6. The operating conditions as existing at the time of sampling or measurement.
- (b) Digital data accumulation which utilizes valid data compression techniques shall be acceptable for compliance determination as long as such compression does not violate an applicable requirement and its use has been approved in advance by the Technical Secretary.
- TAPCR 1200-03-09-.02(11)(e)1(iii)
- B2. Retention of monitoring data.** The permittee shall retain records of all required monitoring data and support information for a period of at least 5 years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit.
- TAPCR 1200-03-09-.02(11)(e)1(iii)(II)II
- B3. Reporting.** Reports of any required monitoring and record keeping shall be submitted to the Technical Secretary in accordance with the frequencies specified in the permit conditions for each individual permit unit. Reports shall be submitted within 60 days of the close of the reporting period unless otherwise noted. All instances of deviations from permit requirements must be clearly identified in such reports. All required reports must be certified by a responsible official. Reports required under "State only requirements" are not required to be certified by a responsible official.
- TAPCR 1200-03-09-.02(11)(e)1(iii)
- B4. Certification.** Except for reports required under "State Only" requirements, any application form, report or compliance certification submitted pursuant to the requirements of this permit shall contain certification by a responsible official of truth, accuracy and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete.
- TAPCR 1200-03-09-.02(11)(d)4
- B5. Annual compliance certification.** The permittee shall submit annually compliance certifications with terms and conditions contained in Sections A, B, D and E of this permit, including emission limitations, standards, or work practices. This compliance certification shall include all of the following (provided that the identification of applicable information may cross-reference the permit or previous reports, as applicable):
- (a) The identification of each term or condition of the permit that is the basis of the certification;
 - (b) The identification of the method(s) or other means used by the owner or operator for determining the compliance status with each term and condition during the certification period; such methods and other means shall include, at a minimum, the methods and means required by this permit. If necessary, the owner or operator also shall identify any other material information that must be included in the certification to comply with section 113(c)(2) of the Federal Act, which prohibits knowingly making a false certification or omitting material information;
 - (c) The status of compliance with the terms and conditions of the permit for the period covered by the certification, including whether compliance during the period was continuous or intermittent. The certification shall be based on the method or means designated in B5(b) above. The certification shall identify each deviation and take it into account in the compliance certification. The certification shall also identify as possible exceptions to compliance any periods during which compliance is required and in which an excursion* or exceedance** as defined below occurred; and
 - (d) Such other facts as the Technical Secretary may require to determine the compliance status of the source.
- * "Excursion" shall mean a departure from an indicator range established for monitoring under this paragraph, consistent with any averaging period specified for averaging the results of the monitoring.

** "Exceedance" shall mean a condition that is detected by monitoring that provides data in terms of an emission limitation or standard and that indicates that emissions (or opacity) are greater than the applicable emission limitation or standard (or less than the applicable standard in the case of a percent reduction requirement) consistent with any averaging period specified for averaging the results of the monitoring.

40 CFR Part 70.6(c)(5)(iii) as amended in the Federal Register Vol. 79, No.144, July 28, 2014, pages 43661 through 43667

B6. Submission of compliance certification. The compliance certification shall be submitted to:

The Tennessee Department of Environment and Conservation Environmental Field Office specified in Section E of this permit	and	Air Enforcement and Toxics Branch US EPA Region IV 61 Forsyth Street, SW Atlanta, Georgia 30303
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TAPCR 1200-03-09-.02(11)(e)3(v)(IV)

B7. Emergency provisions. An emergency constitutes an affirmative defense to an enforcement action brought against this source for noncompliance with a technology based emission limitation due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.

(a) The affirmative defense of the emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:

1. An emergency occurred and that the permittee can identify the probable cause(s) of the emergency. "Probable" must be supported by a credible investigation into the incident that seeks to identify the causes and results in an explanation supported by generally accepted engineering or scientific principles.

2. The permitted source was at the time being properly operated. In determining whether or not a source was being properly operated, the Technical Secretary shall examine the source's written standard operating procedures which were in effect at the time of the noncompliance and any other code as detailed below that would be relevant to preventing the noncompliance. Adherence to the source's standard operating procedures will be the test of adequate preventative maintenance, careless operation, improper operation or operator error to the extent that such adherence would prevent noncompliance. The source's failure to follow recognized standards of practice to the extent that adherence to such a standard would have prevented noncompliance will disqualify the source from any claim of an emergency and an affirmative defense.

3. During the period of the emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit.

4. The permittee submitted notice of the emergency to the Technical Secretary according to the notification criteria for malfunctions in rule 1200-03-20-.03. For the purposes of this condition, "emergency" shall be substituted for "malfunction(s)" in rule 1200-03-20-.03 to determine the relevant notification threshold. The notice shall include a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.

(b) In any enforcement proceeding the permittee seeking to establish the occurrence of an emergency has the burden of proof.

(c) The provisions of this condition are in addition to any emergency, malfunction or upset requirement contained in Division 1200-03 or other applicable requirement.

TAPCR 1200-03-09-.02(11)(e)7

B8. Excess emissions reporting.

(a) The permittee shall promptly notify the Technical Secretary when any emission source, air pollution control equipment, or related facility breaks down in such a manner to cause the emission of air contaminants in excess of the applicable emission standards contained in Division 1200-03 or any permit issued thereto, or of sufficient duration to cause damage to property or public health. The permittee must provide the Technical Secretary with a statement giving all pertinent facts, including the estimated duration of the breakdown. Violations of the visible emission standard which occur for less than 20 minutes in one day (midnight to midnight) need not be reported. Prompt notification will be within 24 hours of the malfunction and shall be provided by telephone to the Division's Nashville office. The Technical Secretary shall be notified when the condition causing the failure or breakdown has been corrected. In attainment and unclassified areas if emissions other than from sources designated as significantly impacting on a nonattainment area in excess of the standards will not and do not occur over more than a 24-hour period (or will not recur over more than a 24-hour period) and no damage to property and or public health is anticipated, notification is not required.

(b) Any malfunction that creates an imminent hazard to health must be reported by telephone immediately to the Division's Nashville office at (615) 532-0554 and to the State Civil Defense.

(c) A log of all malfunctions, startups, and shutdowns resulting in emissions in excess of the standards in Division 1200-03 or any permit issued thereto must be kept at the plant. All information shall be entered in the log no later than twenty-four (24) hours after the startup or shutdown is complete, or the malfunction has ceased or has been corrected. Any later discovered corrections can be added in the log as footnotes with the reason given for the change. This log must record at least the following:

1. Stack or emission point involved
2. Time malfunction, startup, or shutdown began and/or when first noticed
3. Type of malfunction and/or reason for shutdown
4. Time startup or shutdown was complete or time the air contaminant source returned to normal operation
5. The company employee making entry on the log must sign, date, and indicate the time of each log entry

The information under items 1. and 2. must be entered into the log by the end of the shift during which the malfunction or startup began. For any source utilizing continuous emission(s) monitoring, continuous emission(s) monitoring collection satisfies the above log keeping requirement.

TAPCR 1200-03-20-.03 and .04

B9. Malfunctions, startups and shutdowns - reasonable measures required. The permittee must take all reasonable measures to keep emissions to a minimum during startups, shutdowns, and malfunctions. These measures may include installation and use of alternate control systems, changes in operating methods or procedures, cessation of operation until the process equipment and/or air pollution control equipment is repaired, maintaining sufficient spare parts, use of overtime labor, use of outside consultants and contractors, and other appropriate means. Failures that are caused by poor maintenance, careless operation or any other preventable upset condition or preventable equipment breakdown shall not be considered malfunctions. This provision does not apply to standards found in 40 CFR, Parts 60(Standards of performance for new stationary sources), 61(National emission standards for hazardous air pollutants) and 63(National emission standards for hazardous air pollutants for source categories).

TAPCR 1200-03-20-.02

B10. Reserved.

B11. Report required upon the issuance of a notice of violation for excess emissions. The permittee must submit within twenty (20) days after receipt of the notice of violation, the data shown below to assist the Technical Secretary in deciding whether to excuse or validate the violation. If this data has previously been available to the Technical Secretary prior to the issuance of the notice of violation no further action is required of the violating source. However, if the source desires to submit additional information, then this must be submitted within the same twenty (20) day time period. The minimum data requirements are:

- (a) The identity of the stack and/or other emission point where the excess emission(s) occurred;
- (b) The magnitude of the excess emissions expressed in pounds per hour and the units of the applicable emission limitation and the operating data and calculations used in determining the magnitude of the excess emissions;
- (c) The time and duration of the emissions;
- (d) The nature and cause of such emissions;
- (e) For malfunctions, the steps taken to correct the situation and the action taken or planned to prevent the recurrence of such malfunctions;
- (f) The steps taken to limit the excess emissions during the occurrence reported, and
- (g) If applicable, documentation that the air pollution control equipment, process equipment, or processes were at all times maintained and operated in a manner consistent with good operating practices for minimizing emissions.

Failure to submit the required report within the twenty (20) day period specified shall preclude the admissibility of the data for consideration of excusal for malfunctions.

TAPCR 1200-03-20-.06(2), (3) and (4)

SECTION C

PERMIT CHANGES

- C1. Operational flexibility changes.** The source may make operational flexibility changes that are not addressed or prohibited by the permit without a permit revision subject to the following requirements:
- (a) The change cannot be subject to a requirement of Title IV of the Federal Act or Chapter 1200-03-30.
 - (b) The change cannot be a modification under any provision of Title I of the federal Act or Division 1200-03.
 - (c) Each change shall meet all applicable requirements and shall not violate any existing permit term or condition.
 - (d) The source must provide contemporaneous written notice to the Technical Secretary and EPA of each such change, except for changes that are below the threshold of levels that are specified in Rule 1200-03-09-.04.
 - (e) Each change shall be described in the notice including the date, any change in emissions, pollutants emitted, and any applicable requirements that would apply as a result of the change.
 - (f) The change shall not qualify for a permit shield under the provisions of part 1200-03-09-.02(11)(e)6.
 - (g) The permittee shall keep a record describing the changes made at the source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under the permit, and the emissions resulting from those changes. The records shall be retained until the changes are incorporated into subsequently issued permits.

TAPCR 1200-03-09-.02(11)(a)4 (ii)

- C2. Section 502(b)(10) changes.**
- (a) The permittee can make certain changes without requiring a permit revision, if the changes are not modifications under Title I of the Federal Act or Division 1200-03 and the changes do not exceed the emissions allowable under the permit. The permittee must, however, provide the Administrator and Technical Secretary with written notification within a minimum of 7 days in advance of the proposed changes. The Technical Secretary may waive the 7 day advance notice in instances where the source demonstrates in writing that an emergency necessitates the change. Emergency shall be demonstrated by the criteria of TAPCR 1200-03-09-.02(11)(e)7 and in no way shall it include changes solely to take advantages of an unforeseen business opportunity. The Technical Secretary and EPA shall attach each such notice to their copy of the relevant permit.
 - (b) The written notification must be signed by a facility Title V responsible official and include the following:
 - 1. a brief description of the change within the permitted facility;
 - 2. the date on which the change will occur;
 - 3. a declaration and quantification of any change in emissions;
 - 4. a declaration of any permit term or condition that is no longer applicable as a result of the change; and
 - 5. a declaration that the requested change is not a Title I modification and will not exceed allowable emissions under the permit.
 - (c) The permit shield provisions of TAPCR 1200-03-09-.02(11)(e)6 shall not apply to Section 502(b)(10) changes.

TAPCR 1200-03-09-.02(11)(a)4 (i)

- C3. Administrative amendment.**
- (a) Administrative permit amendments to this permit shall be in accordance with 1200-03-09-.02(11)(f)4. The source may implement the changes addressed in the request for an administrative amendment immediately upon submittal of the request.
 - (b) The permit shield shall be extended as part of an administrative permit amendment revision consistent with the provisions of TAPCR 1200-03-09-.02(11)(e)6 for such revisions made pursuant to item (c) of this condition which meet the relevant requirements of TAPCR 1200-03-09-.02(11)(e), TAPCR 1200-03-09-.02(11)(f) and TAPCR 1200-03-09-.02(11)(g) for significant permit modifications.
 - (c) Proceedings to review and grant administrative permit amendments shall be limited to only those parts of the permit for which cause to amend exists, and not the entire permit.

TAPCR 1200-03-09-.02(11)(f)4

- C4. Minor permit modifications.**
- (a) The permittee may submit an application for a minor permit modification in accordance with TAPCR 1200-03-09-.02(11)(f)5(ii).
 - (b) The permittee may make the change proposed in its minor permit modification immediately after an application is filed with the Technical Secretary.
 - (c) Proceedings to review and modify permits shall be limited to only those parts of the permit for which cause to modify exists, and not the entire permit.

- (d) Minor permit modifications do not qualify for a permit shield.

TAPCR 1200-03-09-.02(11)(f)5(ii)

C5. Significant permit modifications.

(a) The permittee may submit an application for a significant modification in accordance with TAPCR 1200-03-09-.02(11)(f)5(iv).

(b) Proceedings to review and modify permits shall be limited to only those parts of the permit for which cause to modify exists, and not the entire permit.

TAPCR 1200-03-09-.02(11)(f)5(iv)

C6. New construction or modifications.

Future construction at this facility that is subject to the provisions of TAPCR 1200-03-09-.01 shall be governed by the following:

(a) The permittee shall designate in their construction permit application the route that they desire to follow for the purposes of incorporating the newly constructed or modified sources into their existing operating permit. The Technical Secretary shall use that information to prepare the operating permit application submittal deadlines in their construction permit.

(b) Sources desiring the permit shield shall choose the administrative amendment route of TAPCR 1200-03-09-.02(11)(f)4 or the significant modification route of TAPCR 1200-03-09-.02(11)(f)5(iv).

(c) Sources desiring expediency instead of the permit shield shall choose the minor permit modification procedure route of TAPCR 1200-03-09-.02(11)(f)5(ii) or group processing of minor modifications under the provisions of TAPCR 1200-03-09-.02(11)(f)5(iii) as applicable to the magnitude of their construction.

TAPCR 1200-03-09-.02(11)(d) 1(i)(V)

SECTION D

GENERAL APPLICABLE REQUIREMENTS

- D1. Visible emissions.** With the exception of air emission sources exempt from the requirements of TAPCR Chapter 1200-03-05 and air emission sources for which a different opacity standard is specifically provided elsewhere in this permit, the permittee shall not cause, suffer, allow or permit discharge of a visible emission from any air contaminant source with an opacity in excess of twenty (20) percent for an aggregate of more than five (5) minutes in any one (1) hour or more than twenty (20) minutes in any twenty-four (24) hour period; provided, however, that for fuel burning installations with fuel burning equipment of input capacity greater than 600 million btu per hour, the permittee shall not cause, suffer, allow, or permit discharge of a visible emission from any fuel burning installation with an opacity in excess of twenty (20) percent (6-minute average) except for one six minute period per one (1) hour of not more than forty (40) percent opacity. Sources constructed or modified after July 7, 1992 shall utilize 6-minute averaging.
- Consistent with the requirements of TAPCR Chapter 1200-03-20, due allowance may be made for visible emissions in excess of that permitted under TAPCR 1200-03-05 which are necessary or unavoidable due to routine startup and shutdown conditions. The facility shall maintain a continuous, current log of all excess visible emissions showing the time at which such conditions began and ended and that such record shall be available to the Technical Secretary or his representative upon his request.
- TAPCR 1200-03-05-.01(1), TAPCR 1200-03-05-.03(6) and TAPCR 1200-03-05-.02(1)
- D2. General provisions and applicability for non-process gaseous emissions.** Any person constructing or otherwise establishing a non-portable air contaminant source emitting gaseous air contaminants after April 3, 1972, or relocating an air contaminant source more than 1.0 km from the previous position after November 6, 1988, shall install and utilize the best equipment and technology currently available for controlling such gaseous emissions.
- TAPCR 1200-03-06-.03(2)
- D3. Non-process emission standards.** The permittee shall not cause, suffer, allow, or permit particulate emissions from non-process sources in excess of the standards in TAPCR 1200-03-06.
- D4. General provisions and applicability for process gaseous emissions.** Any person constructing or otherwise establishing an air contaminant source emitting gaseous air contaminants after April 3, 1972, or relocating an air contaminant source more than 1.0 km from the previous position after November 6, 1988, shall install and utilize equipment and technology which is deemed reasonable and proper by the Technical Secretary.
- TAPCR 1200-03-07-.07(2)
- D5. Particulate emissions from process emission sources.** The permittee shall not cause, suffer, allow, or permit particulate emissions from process sources in excess of the standards in TAPCR 1200-03-07.
- D6. Sulfur dioxide emission standards.** The permittee shall not cause, suffer, allow, or permit Sulfur dioxide emissions from process and non-process sources in excess of the standards in TAPCR 1200-03-14. Regardless of the specific emission standard, new process sources shall utilize the best available control technology as deemed appropriate by the Technical Secretary of the Tennessee Air Pollution Control Board.
- D7. Fugitive Dust.**
- (a) The permittee shall not cause, suffer, allow, or permit any materials to be handled, transported, or stored; or a building, its appurtenances, or a road to be used, constructed, altered, repaired, or demolished without taking reasonable precautions to prevent particulate matter from becoming airborne. Such reasonable precautions shall include, but not be limited to, the following:
1. Use, where possible, of water or chemicals for control of dust in demolition of existing buildings or structures, construction operations, grading of roads, or the clearing of land;
 2. Application of asphalt, oil, water, or suitable chemicals on dirt roads, material stock piles, and other surfaces which can create airborne dusts;

3. Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty materials. Adequate containment methods shall be employed during sandblasting or other similar operations.

(b) The permittee shall not cause, suffer, allow, or permit fugitive dust to be emitted in such manner to exceed five (5) minutes per hour or twenty (20) minutes per day as to produce a visible emission beyond the property line of the property on which the emission originates, excluding malfunction of equipment as provided in Chapter 1200-03-20.

TAPCR 1200-03-08

D8. Open burning. The permittee shall comply with the TAPCR 1200-03-04 for all open burning activities at the facility.

TAPCR 1200-03-04

D9. Asbestos. Where applicable, the permittee shall comply with the requirements of 1200-03-11-.02(2)(d) when conducting any renovation or demolition activities at the facility.

TAPCR 1200-03-11-.02(2)(d) and 40 CFR, Part 61

D10. Annual certification of compliance. The generally applicable requirements set forth in Section D of this permit are intended to apply to activities and sources that are not subject to source-specific applicable requirements contained in State of Tennessee and U.S. EPA regulations. By annual certification of compliance, the permittee shall be considered to meet the monitoring and related record keeping and reporting requirements of TAPCR 1200-03-09-.02(11)(e)1.(iii) and 1200-03-10-.04(2)(b)1 and compliance requirements of TAPCR 1200-03-09-.02(11)(e)3.(i). The permittee shall submit compliance certification for these conditions annually.

SECTION E

SOURCE SPECIFIC EMISSION STANDARDS, OPERATING LIMITATIONS, and MONITORING, RECORDKEEPING and REPORTING REQUIREMENTS

92-0052	Facility Description:	Brick Manufacturing Facility with Two Kilns Fired with Natural Gas and associated clay grinding and raw material mixing operations.
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Conditions E1 through E3 apply to all sources in Section E of this permit unless otherwise noted.

E1. Fee payment

FEE EMISSIONS SUMMARY TABLE FOR MAJOR SOURCE 92-0052

REGULATED POLLUTANTS	ALLOWABLE EMISSIONS (tons per AAP)	ACTUAL EMISSIONS (tons per AAP)	COMMENTS
PARTICULATE MATTER (PM)	250	AEAR	Includes all fee emissions.
PM ₁₀	N/A	N/A	Not applicable.
SO ₂	249	AEAR	Includes all fee emissions.
VOC	N/A	AEAR	Includes all fee emissions.****
NO _x	N/A	AEAR	Includes all fee emissions.****
CATEGORY OF MISCELLANEOUS HAZARDOUS AIR POLLUTANTS (HAP WITHOUT A STANDARD)*			
VOC FAMILY GROUP	N/A	N/A	Not applicable.
NON-VOC GASEOUS GROUP	69.8	AEAR	Not included above HF & HCl
PM FAMILY GROUP	N/A	AEAR	Fee emissions are not included above.
CATEGORY OF SPECIFIC HAZARDOUS AIR POLLUTANTS (HAP WITH A STANDARD)**			
VOC FAMILY GROUP	N/A	N/A	Not applicable.
NON-VOC GASEOUS GROUP	N/A	N/A	Not applicable.
PM FAMILY GROUP	N/A	N/A	Not applicable.
CATEGORY OF NSPS POLLUTANTS NOT LISTED ABOVE***			
EACH NSPS POLLUTANT NOT LISTED ABOVE	N/A	N/A	Not applicable.

NOTES

AAP The **Annual Accounting Period (AAP)** is a twelve (12) consecutive month period that **either (a) begins each July 1st and ends June 30th of the following year when fees are paid on a fiscal year basis, or (b) begins January 1st and ends December 31st of the same year when paying on a calendar year basis.** The **Annual Accounting Period** at the time of permit renewal issuance **began July 1, 2017 and ends June 30, 2018** The next **Annual Accounting Period** begins **July 1, 2018** and ends **June 30, 2019** unless a request to change the annual accounting period is submitted by the responsible official as required by subparagraph 1200-03-26-.02(9)(b) and approved by the Technical Secretary. If the permittee wishes to revise their annual accounting period or their annual emission fee basis as allowed by subparagraph 1200-03-26-.02(9)(b), the responsible official must submit the request to the Division in writing on or before December 31 of the annual accounting period for which the fee is due. If a change in fee basis from allowable emissions to actual emissions for any pollutant is requested, the request from the responsible official must include the methods that will be used to determine actual emissions.

N/A N/A indicates that no emissions are specified for fee computation.

AEAR If the permittee is paying annual emission fees on an actual emissions basis, **AEAR** indicates that an **Actual Emissions Analysis** is **Required** to determine the actual emissions of:

- (1) **each regulated pollutant** (Particulate matter, SO₂, VOC, NO_x and so forth. See TAPCR 1200-03-26-.02(2)(i) for the definition of a regulated pollutant.),

- (2) **each pollutant group** (VOC Family, Non-VOC Gaseous, and Particulate Family),
- (3) **the Miscellaneous HAP Category**,
- (4) **the Specific HAP Category**, and
- (5) **the NSPS Category**

under consideration during the **Annual Accounting Period**.

- * **Category Of Miscellaneous HAP (HAP Without A Standard):** This category is made-up of hazardous air pollutants that do not have a federal or state standard. Each HAP is classified into one of three groups, the **VOC Family** group, the **Non-VOC Gaseous** group, or the **Particulate (PM) Family** group. **For fee computation**, the **Miscellaneous HAP Category** is subject to the 4,000 ton cap provisions of subparagraph 1200-03-26-.02(2)(i).
- ** **Category Of Specific HAP (HAP With A Standard):** This category is made-up of hazardous air pollutants (HAP) that are subject to Federally promulgated Hazardous Air Pollutant Standards that can be imposed under Chapter 1200-03-11 or Chapter 1200-03-31. Each individual hazardous air pollutant is classified into one of three groups, the **VOC Family** group, the **Non-VOC Gaseous** group, or the **Particulate (PM) Family** group. **For fee computation**, each individual hazardous air pollutant of the **Specific HAP Category** is subject to the 4,000 ton cap provisions of subparagraph 1200-03-26-.02(2)(i).
- *** **Category Of NSPS Pollutants Not Listed Above:** This category is made-up of each New Source Performance Standard (NSPS) pollutant whose emissions are not included in the **PM**, **SO₂**, **VOC** or **NO_x** emissions from each source in this permit. **For fee computation**, each **NSPS pollutant not listed above** is subject to the 4,000 ton cap provisions of subparagraph 1200-03-26-.02(2)(i).

END NOTES

- The permittee shall:**
- (1) Pay Title V **annual emission fees**, on the emissions and year bases requested by the responsible official and approved by the Technical Secretary, for each annual accounting period (AAP) by the payment deadline(s) established in TAPCR 1200-03-26-.02(9)(g). Fees may be paid on an **actual**, **allowable**, or **mixed** emissions basis; and on either a **state fiscal year** or a **calendar year**, provided the requirements of 1200-03-26-.02(9)(b) are met. If any part of any fee imposed under TAPCR 1200-03-26-.02 is not paid within fifteen (15) days of the due date, penalties shall at once accrue as specified in TAPCR 1200-03-26-.02(8).
 - (2) Sources paying annual emissions fees on an allowable emissions basis: pay annual allowable based emission fees for each annual accounting period pursuant to TAPCR 1200-03-26-.02(9)(d).
 - (3) Sources paying annual emissions fees on an actual emissions basis: prepare an **actual emissions analysis** for each AAP and pay **actual based emission fees** pursuant to TAPCR 1200-03-26-.02(9)(d). The **actual emissions analysis** shall include:
 - (a) the completed **Fee Emissions Summary Table**,
 - (b) each **actual emissions analysis** required, and
 - (c) the actual emission records for each pollutant and each source as required for actual emission fee determination, or a summary of the actual emission records required for fee determination, as specified by the Technical Secretary or the Technical Secretary's representative. These calculations must be based on the annual fee basis approved by the Technical Secretary (a state fiscal year [July 1 through June 30] or a calendar year [January 1 through December 31]). These records shall be used to complete the **actual emissions analyses** required by the above **Fee Emissions Summary Table**.
 - (4) Sources paying annual emissions fees on a mixed emissions basis: for all pollutants and all sources for which the permittee has chosen an actual emissions basis, prepare an **actual emissions analysis** for each AAP and pay **actual based emission fees** pursuant to TAPCR 1200-03-26-.02(9)(d). The **actual emissions analysis** shall include:
 - (a) the completed **Fee Emissions Summary Table**,
 - (b) each **actual emissions analysis** required, and
 - (c) the actual emission records for each pollutant and each source as required for actual emission fee determination, or a summary of the actual emission records required for fee determination, as specified by the Technical Secretary or the Technical Secretary's representative. These calculations must be based on the fee bases

approved by the Technical Secretary (payment on an actual or mixed emissions basis) and payment on a state fiscal year (July 1 through June 30) or a calendar year (January 1 through December 31). These records shall be used to complete the **actual emissions analysis**.

For all pollutants and all sources for which the permittee has chosen an allowable emissions basis, pay allowable based emission fees pursuant to TAPCR 1200-03-26-.02(9)(d).

- (5) When paying on an actual or mixed emissions basis, submit the **actual emissions analyses** at the time the fees are paid in full.

The annual emission fee due dates are specified in TAPCR 1200-03-26-.02(g) and are dependent on the Responsible Official's choice of fee bases as described above. If any part of any fee imposed under TAPCR 1200-03-26-.02 is not paid within fifteen (15) days of the due date, penalties shall at once accrue as specified in TAPCR 1200-03-26-.02(8). Emissions for regulated pollutants shall not be double counted as specified in Condition A8(d) of this permit.

Payment of the fee due and the actual emissions analysis (if required) shall be submitted to The Technical Secretary at the following address:

Payment of Fee to:

The Tennessee Department of Environment and Conservation
Division of Fiscal Services
Consolidated Fee Section – APC
William R. Snodgrass Tennessee Tower
312 Rosa L. Parks Avenue, 10th Floor
Nashville, Tennessee 37243

Actual Emissions Analyses to:

The Tennessee Department of Environment and Conservation
Division of Air Pollution Control
East Tennessee Permit Program
William R. Snodgrass Tennessee Tower
312 Rosa L. Parks Avenue, 15th Floor
Nashville, Tennessee 37243

or

An electronic copy (PDF) of actual emissions analysis can also be submitted to: apc.inventory@tn.gov

E2. Reporting requirements

(a) **Semiannual reports.** In order to maintain the same reporting schedule established in the original Title V permit, the first report for this renewal shall cover the following permits and time periods:

Permit	Report period begins	Report period ends
561519(existing)	October 1, 2017	Day before issuance date of permit 572182
572182 (renewal)	Issuance date of permit 572182	March 31, 2018

The report covering the full 6 month period shall be submitted within 60 days after March 31 2018. Subsequent reports revert fully to permit #572182 and shall be submitted within 60 days after the end of each 6-month period following the first report. Semiannual periods continue to cover the periods April through September and October through March. All instances of deviations from permit requirements must be clearly identified in these reports and the reports must be certified by a responsible official.

These semiannual reports shall include:

- (1) Any monitoring and/or recordkeeping required by Conditions E6-1, E6-2, E6-3, E6-5, E7-1, E7-2 , E7-3 and E7-5 of this permit. However, a summary report of this data is acceptable provided there is sufficient information to enable the Technical Secretary to evaluate compliance.
- (2) The visible emission evaluation readings as required in Conditions E5-2, E6-6 and E7-6 of this permit. However, a summary report of this data is acceptable provided there is sufficient information to enable the Technical Secretary to evaluate compliance.
- (3) Identification of all instances of deviations from **ALL PERMIT REQUIREMENTS**.

These reports must be certified by a responsible official consistent with condition B4 of this permit and shall be submitted to The Technical Secretary at the address in Condition E2(b) of this permit.

TAPCR 1200-03-09-.02(11)(e)1.(iii)

(b) **Annual compliance certification.** The permittee shall submit annually compliance certifications with each term or condition contained in Sections A, B, D and E of this permit, including emission limitations, standards, or work practices. This compliance certification shall include all of the following (provided that the identification of applicable information may cross-reference the permit or previous reports, as applicable):

- (1) The identification of each term or condition of the permit that is the basis of the certification;
- (2) The identification of the method(s) or other means used by the owner or operator for determining the compliance status with each term and condition during the certification period; Such methods and other means shall include, at a minimum, the methods and means required by this permit. If necessary, the owner or operator also shall identify any other material information that must be included in the certification to comply with section 113(c)(2) of the Federal Act, which prohibits knowingly making a false certification or omitting material information;
- (3) The status of compliance with each term or condition of the permit for the period covered by the certification, including whether compliance during the period was continuous or intermittent. The certification shall be based on the method or means designated in E2(b)2 above. The certification shall identify each deviation and take it into account in the compliance certification. The certification shall also identify as possible exceptions to compliance any periods during which compliance is required and in which an excursion* or exceedance** as defined below occurred; and
- (4) Such other facts as the Technical Secretary may require to determine the compliance status of the source.

* "Excursion" shall mean a departure from an indicator range established for monitoring under this paragraph, consistent with any averaging period specified for averaging the results of the monitoring.

** "Exceedance" shall mean a condition that is detected by monitoring that provides data in terms of an emission limitation or standard and that indicates that emissions (or opacity) are greater than the applicable emission limitation or standard (or

less than the applicable standard in the case of a percent reduction requirement) consistent with any averaging period specified for averaging the results of the monitoring.

The first certification shall cover the 12-month period from **October 1, 2017**, to **September 30, 2018**, and shall be submitted within 60 days after the 12-month period ending **September 30, 2018**. Subsequent certifications shall be submitted within 60 days after the end of each 12-month period following the first certification.

These certifications shall be submitted to: **TN APCD** and **EPA**

Jackson Environmental Field Office
Division of Air Pollution Control
1625 Hollywood Drive
Jackson, Tennessee 38308
or

and

Air Enforcement and Toxics Branch
US EPA Region IV
61 Forsyth Street, SW
Atlanta, GA 30303

Portable Document Format (pdf) copy to:
APC.JackEFO@tn.gov

40 CFR Part 70.6(c)(5)(iii) as amended in the Federal Register Vol. 79, No.144, July 28, 2014, pages 43661 through 43667

- (c) **Retention of Records** All records required by any condition in Section E of this permit must be retained for a period of not less than five years. Additionally, these records shall be kept available for inspection by the Technical Secretary or his representative.

TAPCR 1200-03-09-.02(11)(e)1.(iii)(II)II

E3. General requirements applicable to permitted facility.

- E3-1.** Insignificant activities as stated by the company in the Title V Application per Rule 1200-03-09-.04(5) are listed below. Additional insignificant activities may be added and operated at any time with the provision that a written notification shall be submitted to the Technical Secretary including an updated APC V.2 Application Form along with a Truth, Accuracy, and Completeness Statement signed by a responsible official. The permit may be updated to include additional insignificant sources by means of an Administrative Amendment, if necessary.

Activity - Exemption Rule [1200-03-09-.04(5)(a)4(i)]	Activity - Exemption Rule [1200-03-09-.04(5)(g)(5)]
Dump truck unloading	Gasoline storage tanks (1,250 gallons)
Front-end loader transfer	Diesel storage tank (1,250 gallons)
Crushed brick grinding and screening	Diesel storage tank (800 gallons)
Sand dryer	
Four tunnel dryers	
Primary Clay Crusher	
Conveyors	
Texturing and Sand/Colorant Coating	
Sand/Additive/Colorant Hopper Filling	
Hammer mill/cyclone	

- E3-2.** Logs and records specified in this permit shall be made available upon request by the Technical Secretary or his representative and shall be retained for a period of not less than five years unless otherwise noted. Logs and records contained in this permit are based on a recommended format. Any logs that have an alternative format may be utilized provided such logs contain the same information that is required. Computer-generated logs are also acceptable. Logs and records are not required to be submitted semiannually unless specified in Condition E2(a)(1).

E3-3. Regarding recordkeeping of logs, the following is applicable:

- a) For monthly recordkeeping, all data, including the results of all calculations, must be entered into the log no later than 30 days from the end of the month for which the data is required.
- b) For weekly recordkeeping, all data, including the results of all calculations, must be entered into the log no later than 7 days from the end of the week for which the data is required.
- c) For daily recordkeeping, all data, including the results of all calculations, must be entered into the log no later than 7 days from the end of the day for which the data is required.

E3-4. This Title V Operating Permit 572182 represents the second renewal of the original Title V Operating Permit 548536 issued on July 14, 2003; and all subsequent revisions to the Title V permits issued to this facility.

E3-5. **Accidental release plan.** The permittee is not required to file an accidental release plan pursuant to Section 112(r) of the Clean Air Act and 1200-03-32 of TAPCR.

E3-6. **CAM Plan:** With the exceptions provided in the regulations under 40 CFR Part 64 (Compliance Assurance Monitoring - CAM), this facility (clay grinding operation) is not required to submit a CAM plan as detailed in Sec 3.0 of the approved application.

E3-7. Identification of Responsible Official, and Technical Contact

- a) The email dated January 26, 2018 identifies Bill Tudor, the Regional Production Manager, as the Responsible Official for the permitted facility. If this person terminates employment or is assigned different duties and is no longer a Responsible Official for this facility as defined in part 1200-03-09-.02(11)(b)21 of the Tennessee Air Pollution Control Regulations, the owner or operator of this air contaminant source shall notify the Technical Secretary of the change. Said notification must be in writing and must be submitted within thirty (30) days of the change. The notification shall include the name and title of the new Responsible Official and certification of truth and accuracy. All representations, agreement to terms and conditions, and covenants made by the former Responsible Official that were used in the establishment of the permit terms and conditions will continue to be binding on the facility until such time that a revision to this permit is obtained that would change said representations, agreements, and/or covenants.
- b) The email dated January 26, 2018, identifies David McKeown, the Environmental Manager as the Principal Technical Contact for the permitted facility. If this person terminates employment or is assigned different duties and is no longer the Principal Technical Contact for this facility, the owner or operator of this air contaminant source shall notify the Technical Secretary of the change. Said notification must be in writing and must be submitted within thirty (30) days of the change. The notification shall include the name and title of the new Principal Technical Contact and certification of truth and accuracy.
- c) The email dated January 26, 2018 identifies Tim Clark, the Assistant Plant Manager as the Billing Contact for the permitted facility. If this person terminates employment or is assigned different duties and is no longer the Billing Contact for this facility, the owner or operator of this air contaminant source shall notify the Technical Secretary of the change. Said notification must be in writing and must be submitted within thirty (30) days of the change. The notification shall include the name and title of the new Billing Contact and certification of truth and accuracy.

Conditions E4-1 through E4-19 apply to the MACT requirements

E4. MACT Requirements

E4-1. This facility is required to comply with all applicable requirements found at 40 CFR 63 Subpart JJJJJ National Emission Standards for Hazardous Air Pollutants (NESHAP) for Brick and Structural Clay Products Manufacturing. This includes Attachments 3-12 which contains Table s 1-10 from the Subpart JJJJJ regulations.

You are subject to this subpart if you own or operate a BSCP manufacturing facility that is, is located at, or is part of, a major source of HAP emissions according to the criteria in paragraphs (a) and (b) of this condition.

(a) A BSCP manufacturing facility is a plant site that manufactures brick (including, but not limited to, face brick, structural brick, and brick pavers); clay pipe; roof tile; extruded floor and wall tile; and/or other extruded, dimensional clay products.

Brick and structural clay products manufacturing facilities typically process raw clay and shale, form the processed materials into bricks or shapes, and dry and fire the bricks or shapes. A plant site that manufactures refractory products, as defined in 40 CFR 63.9824, or clay ceramics, as defined in 40 CFR 63.8665, is not a BSCP manufacturing facility.

(b) A major source of HAP emissions is any stationary source or group of stationary sources within a contiguous area under common control that emits or has the potential to emit any single HAP at a rate of 9.07 megagrams (10 tons) or more per year or any combination of HAP at a rate of 22.68 megagrams (25 tons) or more per year.

Pursuant to 40 CFR 63.8385

Compliance Method: None. This condition identifies that this facility is subject to 40 CFR part 63 subpart JJJJ

- E4-2.** (a) 40 CFR 63 Subpart JJJJ applies to each existing, new, or reconstructed affected source at a BSCP manufacturing facility.
- (b) For the purposes of 40 CFR 63 Subpart JJJJ, the affected sources are described in paragraphs (b)(1) and (2) of this condition.
- (1) All tunnel kilns at a BSCP manufacturing facility are an affected source. For the remainder of 40 CFR 63 Subpart JJJJ, a tunnel kiln with a design capacity equal to or greater than 9.07 megagrams per hour (Mg/hr) (10 tons per hour (tph)) of fired product will be called a large tunnel kiln, and a tunnel kiln with a design capacity less than 9.07 Mg/hr (10 tph) of fired product will be called a small tunnel kiln.
- (2) Each periodic kiln is an affected source.
- (c) Process units not subject to the requirements of 40 CFR 63 Subpart JJJJ are listed in paragraphs (c)(1) through (4) of this condition.
- (1) Kilns that are used exclusively for setting glazes on previously fired products are not subject to the requirements of 40 CFR 63 Subpart JJJJ.
- (2) Raw material processing and handling.
- (3) Dryers.
- (4) Sources covered by subparts KKKKK and SSSSS of 40 CFR part 63.
- (d) A source is a new affected source if construction of the affected source began after December 18, 2014, and you met the applicability criteria at the time you began construction.
- (e) An affected source is reconstructed if you meet the criteria as defined in 40 CFR 63.2.
- (f) An affected source is existing if it is not new or reconstructed.

Pursuant to 40 CFR 63.8390

Compliance Method: None. This condition identifies that this facility is subject to 40 CFR part 63 subpart JJJJ

- E4-3.** Regarding compliance with 40 CFR part 63 subpart JJJJ:
- (a) You must comply with 40 CFR 63 Subpart JJJJ no later than the compliance dates in Table 7 (Attachment 9) to this subpart.
- (b) You must meet the notification requirements in condition E4-15 according to the schedule in condition E4-15 and in subpart A of 40 CFR part 63. Some of the notifications must be submitted before you are required to comply with the emission limitations in 40 CFR 63 Subpart JJJJ.

Pursuant to 40 CFR 63.8395

Compliance Method: Compliance shall be assured by completing the requirements as described.

- E4-4.** Regarding Emission limitations and Work practice standards:

- (a) You must meet each emission limit in Table 1 (Attachment #3) to 40 CFR part 63 subpart JJJJ that applies to you.

- (b) You must meet each operating limit in Table 2 (Attachment #4) to 40 CFR part 63 subpart JJJJ that applies to you.
- (c) You must meet each work practice standard in Table 3 (Attachment #5) to 40 CFR part 63 subpart JJJJ that applies to you.

Pursuant to 40 CFR 63.8405

Compliance Method: Compliance shall be assured by meeting the emission limits applicable to this facility

E4-5. Regarding options for meeting the emission limitations and work practice standards:

- (a) To meet the emission limitations in Tables 1 and 2 (Attachments 3 and 4) to 40 CFR part 63 subpart JJJJ, you must use one or more of the options listed in paragraphs (a)(1) and (2) of this condition.
 - (1) *Emissions control system.* Use an emissions capture and collection system and an air pollution control device (APCD) and demonstrate that the resulting emissions meet the emission limits in Table 1 (Attachments 3) to 40 CFR part 63 subpart JJJJ, and that the capture and collection system and APCD meet the applicable operating limits in Table 2 (Attachment 4) to 40 CFR part 63 subpart JJJJ.
 - (2) *Process changes.* Use low-HAP raw materials or implement manufacturing process changes and demonstrate that the resulting emissions or emissions reductions meet the emission limits in Table 1 (Attachment 3) to 40 CFR part 63 subpart JJJJ.
- (b) To meet the work practice standards for affected periodic kilns, you must comply with the requirements listed in Table 3 (Attachment 5) to 40 CFR part 63 subpart JJJJ.
- (c) To meet the work practice standards for dioxins/furans for affected tunnel kilns, you must comply with the requirements listed in Table 3 (Attachment 5) to 40 CFR part 63 subpart JJJJ.
- (d) To meet the work practice standards for affected tunnel kilns during periods of startup and shutdown, you must comply with the requirements listed in Table 3 (Attachment 5) to 40 CFR part 63 subpart JJJJ.

Pursuant to 40 CFR 63.8410

Compliance Method: Compliance shall be assured by completing the requirements as described.

E4-6. Regarding the general requirements for complying with 40 CFR part 63 subpart JJJJ:

- (a) You must be in compliance with the emission limitations (including operating limits) in 40 CFR part 63 subpart JJJJ at all times, except during periods that you are approved for and in compliance with the alternative standard for routine control device maintenance as specified in paragraph (d) of this section, and except during periods of start-up and shutdown, at which time you must comply with the applicable work practice standard specified in Table 3 to 40 CFR part 63 subpart JJJJ.
- (b) At all times, you must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require you to make any further efforts to reduce emissions if levels required by the applicable standard have been achieved. Determination of whether a source is operating in compliance with operation and maintenance requirements will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. During the period between the compliance date specified for your affected source in §63.8395 and the date upon which continuous monitoring systems (CMS) (*e.g.*, continuous parameter monitoring systems) have been installed and verified and any applicable operating limits have been set, you must maintain a log detailing the operation and maintenance of the process and emissions control equipment.
- (c) For each affected kiln that is subject to the emission limits specified in Table 1 to 40 CFR part 63 subpart JJJJ, you must prepare and implement a written operation, maintenance, and monitoring (OM&M) plan according to the requirements in condition E4-7.

- (d) If you own or operate an affected kiln that is subject to the emission limits specified in Table 1 to 40 CFR part 63 subpart JJJJ and must perform routine maintenance on the control device for that kiln, you may bypass the kiln control device and continue operating the kiln subject to the alternative standard established in this paragraph upon approval by the Administrator and provided you satisfy the conditions listed in paragraphs (d)(1) through (5) of this section.
 - (1) You must request to use the routine control device maintenance alternative standard from the Administrator no later than 120 calendar days before the compliance date specified in condition E4-3. Your request must justify the need for the routine maintenance on the control device and the time required to accomplish the maintenance activities, describe the maintenance activities and the frequency of the maintenance activities, explain why the maintenance cannot be accomplished during kiln shutdowns, provide information stating whether the continued operation of the affected source will result in fewer emissions than shutting the source down while the maintenance is performed, describe how you plan to comply with paragraph (b) of this section during the maintenance, and provide any other documentation required by the Administrator.
 - (2) The routine control device maintenance must not exceed 4 percent of the annual operating uptime for each kiln.
 - (3) The request for the routine control device maintenance alternative standard, if approved by the Administrator, must be incorporated by reference in and attached to the affected source's title V permit.
 - (4) You must minimize HAP emissions during the period when the kiln is operating and the control device is offline by complying with the applicable standard in Table 3 to 40 CFR part 63 subpart JJJJ.
 - (5) You must minimize the time period during which the kiln is operating and the control device is offline.
- (e) You must be in compliance with the work practice standards in 40 CFR part 63 subpart JJJJ at all times.
- (f) You must be in compliance with the provisions of subpart A of 40 CFR part 63, except as noted in Table 10 to 40 CFR part 63 subpart JJJJ.

Pursuant to 40 CFR 63.8420

Compliance Method: Compliance shall be assured by completing the requirements as described.

E4-7. Regarding operation, maintenance, and monitoring plans:

- (a) For each affected kiln that is subject to the emission limits specified in Table 1 to 40 CFR part 63 subpart JJJJ, you must prepare, implement, and revise as necessary an OM&M plan that includes the information in paragraph (b) of this condition. Your OM&M plan must be available for inspection by the delegated authority upon request.
- (b) Your OM&M plan must include, as a minimum, the information in paragraphs (b)(1) through (13) of this condition.
 - (1) Each process and APCD to be monitored, the type of monitoring device that will be used, and the operating parameters that will be monitored.
 - (2) A monitoring schedule that specifies the frequency that the parameter values will be determined and recorded.
 - (3) The limits for each parameter that represent continuous compliance with the emission limitations in condition E4-4. The limits must be based on values of the monitored parameters recorded during performance tests.
 - (4) Procedures for the proper operation and routine and long-term maintenance of each APCD, including a maintenance and inspection schedule that is consistent with the manufacturer's recommendations.
 - (5) Procedures for installing the CMS sampling probe or other interface at a measurement location relative to each affected process unit such that the measurement is representative of control of the exhaust emissions (*e.g.*, on or downstream of the last APCD).

- (6) Performance and equipment specifications for the sample interface, the pollutant concentration or parametric signal analyzer, and the data collection and reduction system.
- (7) Continuous monitoring system performance evaluation procedures and acceptance criteria (*e.g.*, calibrations).
- (8) Procedures for the proper operation and maintenance of monitoring equipment consistent with the requirements in condition E4-11 and 40 CFR 63.8(c)(1), (3), (7), and (8).
- (9) Continuous monitoring system data quality assurance procedures consistent with the requirements in 40 CFR 63.8(d)(1) and (2). The owner or operator shall keep these written procedures on record for the life of the affected source or until the affected source is no longer subject to the provisions of 40 CFR part 63, to be made available for inspection, upon request, by the Administrator. If the performance evaluation plan in 40 CFR 63.8(d)(2) is revised, the owner or operator shall keep previous (*i.e.*, superseded) versions of the performance evaluation plan on record to be made available for inspection, upon request, by the Administrator, for a period of 5 years after each revision to the plan. The program of corrective action should be included in the plan required under 40 CFR 63.8(d)(2).
- (10) Continuous monitoring system recordkeeping and reporting procedures consistent with the requirements in conditions E4-16 and E4-17.
- (11) Procedures for responding to operating parameter deviations, including the procedures in paragraphs (b)(11)(i) through (iii) of this condition.
- (i) Procedures for determining the cause of the operating parameter deviation.
- (ii) Actions necessary for correcting the deviation and returning the operating parameters to the allowable limits.
- (iii) Procedures for recording the times that the deviation began and ended and corrective actions were initiated and completed.
- (12) Procedures for keeping records to document compliance.
- (13) If you operate an affected kiln and you plan to take the kiln control device out of service for routine maintenance, as specified in E4-6(d), the procedures specified in paragraphs (b)(13)(i) and (ii) of this condition.
- (i) Procedures for minimizing HAP emissions from the kiln during periods of routine maintenance of the kiln control device when the kiln is operating and the control device is offline.
- (ii) Procedures for minimizing the duration of any period of routine maintenance on the kiln control device when the kiln is operating and the control device is offline.
- (c) Changes to the operating limits in your OM&M plan require a new performance test. If you are revising an operating limit parameter value, you must meet the requirements in paragraphs (c)(1) and (2) of this condition.
- (1) Submit a notification of performance test to the Administrator as specified in 40 CFR 63.7(b).
- (2) After completing the performance tests to demonstrate that compliance with the emission limits can be achieved at the revised operating limit parameter value, you must submit the performance test results and the revised operating limits as part of the Notification of Compliance Status required under 40 CFR 63.9(h).
- (d) If you are revising the inspection and maintenance procedures in your OM&M plan, you do not need to conduct a new performance test.

Pursuant to 40 CFR 63.8425

Compliance Method: Compliance shall be assured by completing the requirements as described.

Testing and Initial Compliance Requirements

- E4-8.** For each affected kiln that is subject to the emission limits specified in Table 1 (Attachment 3) to 40 CFR part 63 subpart JJJJ, you must conduct performance tests within 180 calendar days after December 26, 2018 as specified for your source in condition E4-3 and according to the provisions in 40 CFR 63.7(a)(2).

Pursuant to 40 CFR 63.8435

Compliance Method: Compliance shall be assured by completing the applicable testing requirement requirements as described in Table 1 (Attachment 3).

- E4-9.** Regarding when you must conduct subsequent performance tests:

(a) For each affected kiln that is subject to the emission limits specified in Table 1 to 40 CFR part 63 subpart JJJJ, you must conduct a performance test before renewing your 40 CFR part 70 operating permit or at least every 5 years following the initial performance test.

(b) You must conduct a performance test when you want to change the parameter value for any operating limit specified in your OM&M plan.

Pursuant to 40 CFR 63.8440

Compliance Method: Compliance shall be assured by completing the requirements as described.

- E4-10.** How to conduct performance tests and establish operating limits:

(a) You must conduct each performance test in Table 4 to 40 CFR part 63 subpart JJJJ that applies to you.

(b) Before conducting the performance test, you must install and calibrate all monitoring equipment.

(c) Each performance test must be conducted according to the requirements in 40 CFR 63.7 and under the specific conditions in Table 4 (Attachment 6) to 40 CFR part 63 subpart JJJJ.

(d) Performance tests shall be conducted under such conditions as the Technical Secretary specifies to you based on representative performance of the affected source for the period being tested. Representative conditions exclude periods of startup and shutdown. You may not conduct performance tests during periods of malfunction. You must record the process information that is necessary to document operating conditions during the test and include in such record an explanation to support that such conditions represent normal operation. Upon request, you shall make available to the Technical Secretary such records as may be necessary to determine the conditions of performance tests.

(e) You must conduct at least three separate test runs for each performance test required in this section, as specified in 40 CFR 63.7(e)(3). Each test run must last at least 1 hour.

(f) You must use the data gathered during the performance test and the equations in paragraphs (f)(1) and (2) of this condition to determine compliance with the emission limitations.

(1) To determine compliance with the production-based particulate matter (PM) and mercury (Hg) emission limits in Table 1(Attachment 3) to 40 CFR part 63 subpart JJJJ, you must calculate your mass emissions per unit of production for each test run using Equation 1:

$$MP = \frac{ER}{P} \quad (\text{Eq. 1})$$

Where:

MP = mass per unit of production, kilograms (pounds) of pollutant per megagram (ton) of fired product

ER = mass emission rate of pollutant (PM or Hg) during each performance test run, kilograms (pounds) per hour

P = production rate during each performance test run, megagrams (tons) of fired product per hour.

(2) To determine compliance with the health-based standard for acid gas HAP for BSCP manufacturing facilities in Table 1 to 40 CFR part 63 subpart JJJJJ, you must:

(i) Calculate the HCl-equivalent emissions for HF, HCl, and Cl₂ for each tunnel kiln at your facility using Equation 2:

$$E_i = E_{HCl} + \left[E_{HF} \left(\frac{RfC_{HCl}}{RfC_{HF}} \right) \right] + \left[E_{Cl_2} \left(\frac{RfC_{HCl}}{RfC_{Cl_2}} \right) \right] \quad (\text{Eq. 2})$$

Where:

E_i = HCl-equivalent emissions for kiln i, kilograms (pounds) per hour

E_{HCl} = emissions of HCl, kilograms (pounds) per hour

E_{HF} = emissions of HF, kilograms (pounds) per hour

E_{Cl₂} = emissions of Cl₂, kilograms (pounds) per hour

RfC_{HCl} = reference concentration for HCl, 20 micrograms per cubic meter

RfC_{HF} = reference concentration for HF, 14 micrograms per cubic meter

RfC_{Cl₂} = reference concentration for Cl₂, 0.15 micrograms per cubic meter

(ii) If you have multiple tunnel kilns at your facility, sum the HCl-equivalent values for all tunnel kilns at the facility using Equation 3:

$$E_{total} = \sum_{i=1}^n E_i \quad (\text{Eq. 3})$$

Where:

E_{total} = HCl-equivalent emissions for total of all kilns at facility, kilograms (pounds) per hour

E_i = HCl-equivalent emissions for kiln i, kilograms (pounds) per hour

n = number of tunnel kilns at facility

(iii) Compare this value to the health-based standard in Table 1 (Attachment 3) to 40 CFR part 63 subpart JJJJJ.

(g) You must establish each site-specific operating limit in Table 2 (Attachment 4) to 40 CFR part 63 subpart JJJJJ that applies to you as specified in paragraph (g)(1) of this condition and in Table 4 (Attachment 6) to 40 CFR part 63 subpart JJJJJ.

(1)(i) If you do not have an APCD installed on your kiln, calculate the maximum potential HCl-equivalent emissions for HF, HCl, and Cl₂ for each tunnel kiln at your facility using Equation 4:

$$E_{max,i} = (Cap_i) \left[(MP_{HCl}) + (MP_{HF}) \left(\frac{RfC_{HCl}}{RfC_{HF}} \right) + (MP_{Cl_2}) \left(\frac{RfC_{HCl}}{RfC_{Cl_2}} \right) \right] \quad (\text{Eq. 4})$$

Where:

E_{max,i} = maximum potential HCl-equivalent emissions for kiln i, kilograms (pounds) per hour

Cap_i = design capacity for kiln i, megagrams (tons) of fired product per hour

MP_{iHCl} = mass of HCl per unit of production for kiln i, kilograms (pounds) of HCl per megagram (ton) of fired product

MP_{iHF} = mass of HF per unit of production for kiln i, kilograms (pounds) of HF per megagram (ton) of fired product

MP_{iCl_2} = mass of Cl_2 per unit of production for kiln i, kilograms (pounds) of Cl_2 per megagram (ton) of fired product

RfC_{HCl} = reference concentration for HCl, 20 micrograms per cubic meter

RfC_{HF} = reference concentration for HF, 14 micrograms per cubic meter

RfC_{Cl_2} = reference concentration for Cl_2 , 0.15 micrograms per cubic meter

(ii) If you have multiple tunnel kilns at your facility, sum the maximum potential HCl-equivalent values for all tunnel kilns at the facility using Equation 5:

$$E_{\max \text{ total}} = \sum_{i=1}^n E_{\max i} \quad (\text{Eq. 5})$$

Where:

$E_{\max \text{ total}}$ = maximum potential HCl-equivalent emissions for total of all kilns at facility, kilograms (pounds) per hour

$E_{\max i}$ = maximum potential HCl-equivalent emissions for kiln i, kilograms (pounds) per hour

n = number of tunnel kilns at facility

(iii) If you have a single tunnel kiln at your facility and the total facility maximum potential HCl-equivalent emissions ($E_{\max \text{ total}}$) are greater than the HCl-equivalent limit in Table 1 to 40 CFR part 63 subpart JJJJJ, determine the maximum process rate for the tunnel kiln using Equation 6 that would ensure the total facility maximum potential HCl-equivalent emissions remain at or below the HCl-equivalent limit. The maximum process rate would become your operating limit for process rate and must be included in your OM&M plan.

$$P_{\max i} = \frac{HCl - eq}{\left[(MP_{iHCl}) + (MP_{iHF}) \left(\frac{RfC_{HCl}}{RfC_{HF}} \right) + (MP_{iCl_2}) \left(\frac{RfC_{HCl}}{RfC_{Cl_2}} \right) \right]} \quad (\text{Eq. 6})$$

Where:

$P_{\max i}$ = maximum process rate for kiln i, megagrams (tons) per hour

HCl-eq = HCl-equivalent limit in Table 1 to 40 CFR part 63 subpart JJJJJ, 26 kilograms (57 pounds) per hour

MP_{iHCl} = mass of HCl per unit of production for kiln i, kilograms (pounds) of HCl per megagram (ton) of fired product

MP_{iHF} = mass of HF per unit of production for kiln i, kilograms (pounds) of HF per megagram (ton) of fired product

MP_{iCl_2} = mass of Cl_2 per unit of production for kiln i, kilograms (pounds) of Cl_2 per megagram (ton) of fired product

RfC_{HCl} = reference concentration for HCl, 20 micrograms per cubic meter

RfC_{HF} = reference concentration for HF, 14 micrograms per cubic meter

RfC_{Cl_2} = reference concentration for Cl_2 , 0.15 micrograms per cubic meter

(iv) If you have multiple tunnel kilns at your facility and the total facility maximum potential HCl-equivalent emissions ($E_{\max \text{ total}}$) are greater than the HCl-equivalent limit in Table 1 to 40 CFR part 63 subpart JJJJJ, determine the combination of

maximum process rates that would ensure that total facility maximum potential HCl-equivalent remains at or below the HCl-equivalent limit. The maximum process rates would become your operating limits for process rate and must be included in your OM&M plan.

(2) [Reserved]

(h) For each affected kiln that is subject to the emission limits specified in Table 1(Attachment 3) to 40 CFR part 63 subpart JJJJ and is equipped with an APCD that is not addressed in Table 2 (Attachment 4) to 40 CFR part 63 subpart JJJJ or that is using process changes as a means of meeting the emission limits in Table 1 (Attachment 3) to 40 CFR part 63 subpart JJJJ, you must meet the requirements in 40 CFR 63.8(f) and paragraphs (h)(1) and (2) of this condition.

(1) Submit a request for approval of alternative monitoring procedures to the Administrator no later than the notification of intent to conduct a performance test. The request must contain the information specified in paragraphs (h)(1)(i) through (iv) of this condition.

(i) A description of the alternative APCD or process changes.

(ii) The type of monitoring device or procedure that will be used.

(iii) The operating parameters that will be monitored.

(iv) The frequency that the operating parameter values will be determined and recorded to establish continuous compliance with the operating limits.

(2) Establish site-specific operating limits during the performance test based on the information included in the approved alternative monitoring procedures request and, as applicable, as specified in Table 4 (Attachment 6) to 40 CFR part 63 subpart JJJJ.

Pursuant to 40 CFR 63.8445

Compliance Method: Compliance shall be assured by completing the requirements as described.

E4-11. Regarding monitoring installation, operation, and maintenance requirements:

(a) You must install, operate, and maintain each CMS according to your OM&M plan and the requirements in paragraphs (a)(1) through (5) of this condition.

(1) Conduct a performance evaluation of each CMS according to your OM&M plan.

(2) The CMS must complete a minimum of one cycle of operation for each successive 15-minute period. To have a valid hour of data, you must have at least three of four equally spaced data values (or at least 75 percent if you collect more than four data values per hour) for that hour (not including startup, shutdown, malfunction, out-of-control periods, or periods of routine control device maintenance covered by the routine control device maintenance alternative standard as specified in condition E4-6(d)).

(3) Determine and record the 3-hour block averages of all recorded readings, calculated after every 3 hours of operation as the average of the previous 3 operating hours. To calculate the average for each 3-hour average period, you must have at least 75 percent of the recorded readings for that period (not including startup, shutdown, malfunction, out-of-control periods, or periods of routine control device maintenance covered by the routine control device maintenance alternative standard as specified in E4-6(d)).

(4) Record the results of each inspection, calibration, and validation check.

(5) At all times, maintain the monitoring equipment including, but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.

(b) For each liquid flow measurement device, you must meet the requirements in paragraphs (a)(1) through (5) and paragraphs (b)(1) through (3) of this condition.

(1) Locate the flow sensor in a position that provides a representative flowrate.

(2) Use a flow sensor with a minimum measurement sensitivity of 2 percent of the liquid flowrate.

(3) At least semiannually, conduct a flow sensor calibration check.

(c) For each pressure measurement device, you must meet the requirements in paragraphs (a)(1) through (5) and paragraphs (c)(1) through (7) of this condition.

(1) Locate the pressure sensor(s) in or as close to a position that provides a representative measurement of the pressure.

(2) Minimize or eliminate pulsating pressure, vibration, and internal and external corrosion.

(3) Use a gauge with a minimum measurement sensitivity of 0.5 inch of water or a transducer with a minimum measurement sensitivity of 1 percent of the pressure range.

(4) Check the pressure tap daily to ensure that it is not plugged.

(5) Using a manometer, check gauge calibration quarterly and transducer calibration monthly.

(6) Any time the sensor exceeds the manufacturer's specified maximum operating pressure range, conduct calibration checks or install a new pressure sensor.

(7) At least monthly, inspect all components for integrity, all electrical connections for continuity, and all mechanical connections for leakage.

(d) For each pH measurement device, you must meet the requirements in paragraphs (a)(1) through (5) and paragraphs (d)(1) through (4) of this condition.

(1) Locate the pH sensor in a position that provides a representative measurement of pH.

(2) Ensure the sample is properly mixed and representative of the fluid to be measured.

(3) Check the pH meter's calibration at one point daily.

(4) At least monthly, inspect all components for integrity and all electrical connections for continuity.

(e) For each bag leak detection system, you must meet the requirements in paragraphs (e)(1) through (11) of this condition.

(1) Each triboelectric bag leak detection system must be installed, calibrated, operated, and maintained according to EPA-454/R-98-015, "Fabric Filter Bag Leak Detection Guidance," (incorporated by reference, see 40 CFR 63.14). Other types of bag leak detection systems must be installed, operated, calibrated, and maintained in a manner consistent with the manufacturer's written specifications and recommendations.

(2) The bag leak detection system must be certified by the manufacturer to be capable of detecting PM emissions at concentrations of 10 milligrams per actual cubic meter (0.0044 grains per actual cubic foot) or less.

(3) The bag leak detection system sensor must provide an output of relative PM loadings.

(4) The bag leak detection system must be equipped with a device to continuously record the output signal from the sensor.

- (5) The bag leak detection system must be equipped with an audible alarm system that will sound automatically when an increase in relative PM emissions over a preset level is detected. The alarm must be located where it is easily heard by plant operating personnel.
- (6) For positive pressure fabric filter systems, a bag leak detector must be installed in each baghouse compartment or cell.
- (7) For negative pressure or induced air fabric filters, the bag leak detector must be installed downstream of the fabric filter.
- (8) Where multiple detectors are required, the system's instrumentation and alarm may be shared among detectors.
- (9) The baseline output must be established by adjusting the range and the averaging period of the device and establishing the alarm set points and the alarm delay time according to section 5.0 of the EPA-454/R-98-015, "Fabric Filter Bag Leak Detection Guidance," (incorporated by reference, see 40 CFR 63.14).
- (10) Following initial adjustment of the system, the sensitivity or range, averaging period, alarm set points, or alarm delay time may not be adjusted except as detailed in your OM&M plan. In no case may the sensitivity be increased by more than 100 percent or decreased more than 50 percent over a 365-day period unless such adjustment follows a complete fabric filter inspection that demonstrates that the fabric filter is in good operating condition, as defined in section 5.2 of the "Fabric Filter Bag Leak Detection Guidance," (incorporated by reference, see 40 CFR 63.14). Record each adjustment.
- (11) Record the results of each inspection, calibration, and validation check.
- (f) For each lime, chemical, or carbon feed rate measurement device, you must meet the requirements in paragraphs (a)(1) through (5) and paragraphs (f)(1) and (2) of this condition.
- (1) Locate the measurement device in a position that provides a representative feed rate measurement.
- (2) At least semiannually, conduct a calibration check.
- (g) For each limestone feed system on a dry limestone adsorber (DLA), you must meet the requirements in paragraphs (a)(1), (4), and (5) of this condition and must ensure on a monthly basis that the feed system replaces limestone at least as frequently as the schedule set during the performance test.
- (h) For each temperature measurement device, you must meet the requirements in paragraphs (a)(1) through (5) and paragraphs (h)(1) through (3) of this section.
- (1) Locate the measurement device in a position that provides a representative temperature.
- (2) Use a measurement device with a minimum sensitivity of 1 percent of the temperature being measured.
- (3) At least semiannually, conduct a calibration check.
- (i) Requests for approval of alternate monitoring procedures must meet the requirements in condition E4-10(h) and 63.8(f).

Pursuant to 40 CFR 63.8450

Compliance Method: Compliance shall be assured by completing the requirements as described.

E4-12. Demonstrating initial compliance with the emission limitations and work practice standards

- (a) You must demonstrate initial compliance with each emission limitation and work practice standard that applies to you according to Table 5 (Attachment 7) to 40 CFR part 63 subpart JJJJ.

(b) You must establish each site-specific operating limit in Table 2 (Attachment 4) to 40 CFR part 63 subpart JJJJ that applies to you according to the requirements in 40 CFR 63.8445 and Table 4 (Attachment 6) to 40 CFR part 63 subpart JJJJ.

(c) You must submit the Notification of Compliance Status containing the results of the initial compliance demonstration according to the requirements in condition E4-15(c).

Pursuant to 40 CFR 63.8455

Compliance Method: Compliance shall be assured by completing the requirements as described.

Continuous Compliance Requirements

E4-13. Monitoring and collecting data to demonstrate continuous compliance:

(a) You must monitor and collect data according to this condition.

(b) Except for periods of monitor malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), you must monitor continuously (or collect data at all required intervals) at all times that the affected source is operating. This includes periods of startup, shutdown, malfunction, and routine control device maintenance as specified in condition E4-6(d) when the affected source is operating.

(c) You may not use data recorded during monitoring malfunctions, associated repairs, out-of-control periods, or required quality assurance or control activities for purposes of calculating data averages. You must use all the valid data collected during all other periods in assessing compliance. Any averaging period for which you do not have valid monitoring data and such data are required constitutes a deviation from the monitoring requirements.

Pursuant to 40 CFR 63.8465

Compliance Method: Compliance shall be assured by completing the requirements as described.

E4-14. Demonstrating continuous compliance with the emission limitations and work practice standards

(a) You must demonstrate continuous compliance with each emission limit, operating limit, and work practice standard in Tables 1, 2, and 3 (Attachments 3, 4, and 5) to 40 CFR part 63 subpart JJJJ that applies to you according to the methods specified in Table 6 (Attachment 8) to 40 CFR part 63 subpart JJJJ.

(b) For each affected kiln that is subject to the emission limits specified in Table 1 Attachment 3) to 40 CFR part 63 subpart JJJJ and is equipped with an APCD that is not addressed in Table 2 (Attachment 4) to 40 CFR part 63 subpart JJJJ, or that is using process changes as a means of meeting the emission limits in Table 1 Attachment 3) to 40 CFR part 63 subpart JJJJ, you must demonstrate continuous compliance with each emission limit in Table 1 Attachment 3) to 40 CFR part 63 subpart JJJJ, and each operating limit established as required in condition E4-10(h)(2) according to the methods specified in your approved alternative monitoring procedures request, as described in condition E4-10(h)(1) and 40 CFR 63.8(f).

(c) You must report each instance in which you did not meet each emission limit and each operating limit in 40 CFR part 63 subpart JJJJ that applies to you. These instances are deviations from the emission limitations in 40 CFR part 63 subpart JJJJ. These deviations must be reported according to the requirements in condition E4-10 (c)(9).

(d) [Reserved]

(e)(1) *VE testing*. You must demonstrate continuous compliance with the operating limits in Table 2 (Attachment 4) to 40 CFR part 63 subpart JJJJ for visible emissions (VE) from tunnel kilns that are uncontrolled or equipped with DLA, dry lime injection fabric filter (DIFF), dry lime scrubber/fabric filter (DLS/FF), or other dry control device by monitoring VE at each kiln stack according to the requirements in paragraphs (e)(1)(i) through (v) of this condition.

(i) Perform daily VE observations of each kiln stack according to the procedures of Method 22 of 40 CFR part 60, appendix A-7. You must conduct the Method 22 test while the affected source is operating under normal conditions. The duration of each Method 22 test must be at least 15 minutes.

(ii) If VE are observed during any daily test conducted using Method 22 of 40 CFR part 60, appendix A-7, you must promptly conduct an opacity test, according to the procedures of Method 9 of 40 CFR part 60, appendix A-4. If opacity greater than 10 percent is observed, you must initiate and complete corrective actions according to your OM&M plan.

(iii) You may decrease the frequency of Method 22 testing from daily to weekly for a kiln stack if one of the conditions in paragraph (e)(1)(iii)(A) or (B) of this condition is met.

(A) No VE are observed in 30 consecutive daily Method 22 tests for any kiln stack; or

(B) No opacity greater than 10 percent is observed during any of the Method 9 tests for any kiln stack.

(iv) If VE are observed during any weekly test and opacity greater than 10 percent is observed in the subsequent Method 9 test, you must promptly initiate and complete corrective actions according to your OM&M plan, resume testing of that kiln stack following Method 22 of 40 CFR part 60, appendix A-7, on a daily basis, as described in paragraph (e)(1)(i) of this condition, and maintain that schedule until one of the conditions in paragraph (e)(1)(iii)(A) or (B) of this condition is met, at which time you may again decrease the frequency of Method 22 testing to a weekly basis.

(v) If greater than 10 percent opacity is observed during any test conducted using Method 9 of 40 CFR part 60, appendix A-4, you must report these deviations by following the requirements in condition E4-16.

(2) *Alternative to VE testing*. In lieu of meeting the requirements under paragraph (e)(1) of this section, you may conduct a PM test at least once every year following the initial performance test, according to the procedures of Method 5 of 40 CFR part 60, appendix A-3, and the provisions of condition E4-10(e) and (f)(1).

Pursuant to 40 CFR 63.8470

Compliance Method: Compliance shall be assured by completing the requirements as described.

Notifications, Reports, and Records

E4-15. What notifications must be submitted and when.

(a) You must submit all of the notifications in 40 CFR 40 CFR 63.7(b) and (c), 63.8(f)(4), and 63.9(b) through (e), (g)(1), and (h) that apply to you, by the dates specified.

(b) You must submit all of the notifications specified in Table 8 (Attachment 10) to 40 CFR part 63 subpart JJJJ that apply to you, by the dates specified.

(c) If you are required to conduct a performance test or other initial compliance demonstration as specified in Tables 4 (Attachment 6) and 5 to 40 CFR part 63 subpart JJJJ, your Notification of Compliance Status as specified in Table 8 (Attachment 10) to 40 CFR part 63 subpart JJJJ must include the information in paragraphs (c)(1) through (3) of this condition.

(1) The requirements in 40 CFR 63.9(h)(2)(i).

(2) The operating limit parameter values established for each affected source with supporting documentation and a description of the procedure used to establish the values.

(3) For each APCD that includes a fabric filter, if a bag leak detection system is used, analysis and supporting documentation demonstrating conformance with EPA guidance and specifications for bag leak detection systems in 40 CFR 63.8450(e).

Pursuant to 40 CFR 63.8480

Compliance Method: Compliance shall be assured by completing and submitting the required notifications as described.

E4-16. What reports must be submitted and when.

The reports required in this condition must be certified by a responsible official consistent with condition B4 of this permit and shall be submitted to the Technical Secretary at the address in Condition E2(b) of this permit.

(a) You must submit each report in Table 9 (Attachment 11) to 40 CFR part 63 subpart JJJJ that applies to you.

(b) Unless the Technical Secretary has approved a different schedule for submission of reports under 40 CFR 63.10(a), you must submit each report by the date in Table 9 (Attachment 11) to 40 CFR part 63 subpart JJJJ and as specified in paragraphs (b)(1) through (5) of this condition.

(1) The first compliance report must cover the period beginning on the compliance date that is specified for your affected source in condition E4-3 and ending on either June 30 or December 31. The first reporting period must be at least 6 months, but less than 12 months. For example, if your compliance date is March 1, then the first semiannual reporting period would begin on March 1 and end on December 31.

(2) The first compliance report must be postmarked or delivered no later than July 31 or January 31 for compliance periods ending on June 30 and December 31, respectively.

(3) Each subsequent compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31.

(4) Each subsequent compliance report must be postmarked or delivered no later than July 31 or January 31 for compliance periods ending on June 30 and December 31, respectively.

(5) For each affected source that is subject to permitting regulations pursuant to 40 CFR part 70 or 40 CFR part 71, if the permitting authority has established dates for submitting semiannual reports pursuant to 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), you may submit the first and subsequent compliance reports according to the dates the permitting authority has established instead of the dates in paragraphs (b)(1) through (4) of this condition.

(c) The compliance report must contain the information in paragraphs (c)(1) through (8) of this condition.

(1) Company name and address.

(2) Statement by a responsible official with that official's name, title, and signature, certifying that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.

(3) Date of report and beginning and ending dates of the reporting period.

(4) A description of control device maintenance performed while the control device was offline and the kiln controlled by the control device was operating, including the information specified in paragraphs (c)(4)(i) through (iii) of this condition.

(i) The date and time when the control device was shut down and restarted.

(ii) Identification of the kiln that was operating and the number of hours that the kiln operated while the control device was offline.

(iii) A statement of whether or not the control device maintenance was included in your approved routine control device maintenance request developed as specified in condition E4-6(d). If the control device maintenance was included in your approved routine control device maintenance request, then you must report the information in paragraphs (c)(4)(iii)(A) through (C) of this condition.

(A) The total amount of time that the kiln controlled by the control device operated during the current semiannual compliance period and during the previous semiannual compliance period.

(B) The amount of time that each kiln controlled by the control device operated while the control device was offline for maintenance covered under the routine control device maintenance alternative standard during the current semiannual compliance period and during the previous semiannual compliance period.

(C) Based on the information recorded under paragraphs (c)(4)(iii)(A) and (B) of this section, compute the annual percent of kiln operating uptime during which the control device was offline for routine maintenance using Equation 7.

$$RM = \frac{DT_p + DT_c}{KU_p + KU_c}(100) \quad (\text{Eq. 7})$$

Where:

RM = Annual percentage of kiln uptime during which control device was offline for routine control device maintenance

DT_p = Control device downtime claimed under the routine control device maintenance alternative standard for the previous semiannual compliance period

DT_c = Control device downtime claimed under the routine control device maintenance alternative standard for the current semiannual compliance period

KU_p = Kiln uptime for the previous semiannual compliance period

KU_c = Kiln uptime for the current semiannual compliance period

(5) A report of the most recent burner tune-up conducted to comply with the dioxin/furan work practice standard in Table 3 to 40 CFR part 63 subpart JJJJ.

(6) If there are no deviations from any emission limitations (emission limits or operating limits) that apply to you, the compliance report must contain a statement that there were no deviations from the emission limitations during the reporting period.

(7) If there were no periods during which the CMS was out-of-control as specified in your OM&M plan, the compliance report must contain a statement that there were no periods during which the CMS was out-of-control during the reporting period.

(8) The first compliance report must contain the startup push rate for each kiln, the minimum APCD inlet temperature for each APCD, and the temperature profile for each kiln without an APCD.

(9) For each deviation that occurs at an affected source, report such events in the compliance report by including the information in paragraphs (c)(9)(i) through (iii) of this condition.

(i) The date, time, and duration of the deviation.

(ii) A list of the affected sources or equipment for which the deviation occurred.

(iii) An estimate of the quantity of each regulated pollutant emitted over any emission limit, and a description of the method used to estimate the emissions.

(d) For each deviation from an emission limitation (emission limit or operating limit) occurring at an affected source where you are using a CMS to comply with the emission limitations in 40 CFR part 63 subpart JJJJ, you must include the information in paragraphs (c)(1) through (4) and (c)(9), and paragraphs (d)(1) through (11) of this condition. This includes periods of startup, shutdown, and routine control device maintenance.

(1) The total operating time of each affected source during the reporting period.

(2) The date and time that each CMS was inoperative, except for zero (low-level) and high-level checks.

- (3) The date, time, and duration that each CMS was out-of-control, including the pertinent information in your OM&M plan.
 - (4) Whether each deviation occurred during routine control device maintenance covered in your approved routine control device maintenance alternative standard or during another period, and the cause of each deviation (including unknown cause, if applicable).
 - (5) A description of any corrective action taken to return the affected unit to its normal or usual manner of operation.
 - (6) A breakdown of the total duration of the deviations during the reporting period into those that were due to startup, shutdown, control equipment problems, process problems, other known causes, and other unknown causes.
 - (7) A summary of the total duration of CMS downtime during the reporting period and the total duration of CMS downtime as a percent of the total source operating time during that reporting period.
 - (8) A brief description of the process units.
 - (9) A brief description of the CMS.
 - (10) The date of the latest CMS certification or audit.
 - (11) A description of any changes in CMS, processes, or control equipment since the last reporting period.
- (e) If you have obtained a title V operating permit according to 40 CFR part 70 or 40 CFR part 71, you must report all deviations as defined in 40 CFR part 63 subpart JJJJ in the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A). If you submit a compliance report according to Table 9 to 40 CFR part 63 subpart JJJJ along with, or as part of, the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), and the compliance report includes all required information concerning deviations from any emission limitation (including any operating limit), then submitting the compliance report will satisfy any obligation to report the same deviations in the semiannual monitoring report. However, submitting a compliance report will not otherwise affect any obligation you may have to report deviations from permit requirements to the permitting authority.
- (f) Within 60 calendar days after the date of completing each performance test (as defined in 40 CFR 63.2) required by 40 CFR part 63 subpart JJJJ, you must submit the results of the performance test following the procedure specified in either paragraph (f)(1) or (f)(2) of this condition.
- (1) For data collected using test methods supported by the EPA's Electronic Reporting Tool (ERT) as listed on the EPA's ERT Web site (<http://www.epa.gov/ttn/chief/ert/index.html>) at the time of the test, you must submit the results of the performance test to the EPA via the Compliance and Emissions Data Reporting Interface (CEDRI). (CEDRI can be accessed through the EPA's Central Data Exchange (CDX) (<http://cdx.epa.gov/>).) Performance test data must be submitted in a file format generated through the use of the EPA's ERT or an alternate electronic file format consistent with the extensible markup language (XML) schema listed on the EPA's ERT Web site. If you claim that some of the performance test information being submitted is confidential business information (CBI), you must submit a complete file generated through the use of the EPA's ERT or an alternate electronic file consistent with the XML schema listed on the EPA's ERT Web site, including information claimed to be CBI, on a compact disc, flash drive, or other commonly used electronic storage media to the EPA. The electronic media must be clearly marked as CBI and mailed to U.S. EPA/OAPQS/CORE CBI Office, Attention: Group Leader, Measurement Policy Group, MD C404-02, 4930 Old Page Rd., Durham, NC 27703. The same ERT or alternate file with the CBI omitted must be submitted to the EPA via the EPA's CDX as described earlier in this paragraph.
- (2) For data collected using test methods that are not supported by the EPA's ERT as listed on the EPA's ERT Web site at the time of the test, you must submit the results of the performance test to the Administrator at the appropriate address listed in 40 CFR 63.13.

Pursuant to 40 CFR 63.8485

Compliance Method: Compliance shall be assured by completing and submitting the reports as described.

E4-17. What records must be kept.

(a) You must keep the records listed in paragraphs (a)(1) through (3) of this condition.

(1) A copy of each notification and report that you submitted to comply with 40 CFR part 63 subpart JJJJ, including all documentation supporting any Initial Notification or Notification of Compliance Status that you submitted, according to the requirements in 40 CFR 63.10(b)(2)(xiv).

(2) Records of performance tests as required in 40 CFR 63.10(b)(2)(viii).

(3) Records relating to control device maintenance and documentation of your approved routine control device maintenance request, if you request to use the alternative standard under condition E4-6(d).

(b) You must keep the records required in Table 6 to 40 CFR part 63 subpart JJJJ to show continuous compliance with each emission limitation and work practice standard that applies to you.

(c) You must also maintain the records listed in paragraphs (c)(1) through (11) of this condition.

(1) For each bag leak detection system, records of each alarm, the time of the alarm, the time corrective action was initiated and completed, and a brief description of the cause of the alarm and the corrective action taken.

(2) For each deviation, record the information in paragraphs (c)(2)(i) through (iv) of this section.

(i) The date, time, and duration of the deviation.

(ii) A list of the affected sources or equipment.

(iii) An estimate of the quantity of each regulated pollutant emitted over any emission limit and a description of the method used to estimate the emissions.

(iv) Actions taken to minimize emissions in accordance with condition E4-6(b) and any corrective actions taken to return the affected unit to its normal or usual manner of operation.

(3) For each affected source, records of production rates on a fired-product basis.

(4) Records for any approved alternative monitoring or test procedures.

(5) Records of maintenance and inspections performed on the APCD.

(6) Current copies of your OM&M plan, including any revisions, with records documenting conformance.

(7) Logs of the information required in paragraphs (c)(7)(i) through (iii) of this condition to document proper operation of your periodic kiln.

(i) Records of the firing time and temperature cycle for each product produced in each periodic kiln. If all periodic kilns use the same time and temperature cycles, one copy may be maintained for each kiln. Reference numbers must be assigned to use in log sheets.

(ii) For each periodic kiln, a log that details the type of product fired in each batch, the corresponding time and temperature protocol reference number, and an indication of whether the appropriate time and temperature cycle was fired.

(iii) For each periodic kiln, a log of the actual tonnage of product fired in the periodic kiln and an indication of whether the tonnage was below the maximum tonnage for that specific kiln.

(8) Logs of the maintenance procedures used to demonstrate compliance with the maintenance requirements of the periodic kiln work practice standards specified in Table 3 (Attachment 5) to 40 CFR part 63 subpart JJJJ.

(9) Records of burner tune-ups used to comply with the dioxin/furan work practice standard for tunnel kilns.

(10) For periods of startup and shutdown, records of the following information:

(i) The date, time, and duration of each startup and/or shutdown period, recording the periods when the affected source was subject to the standard applicable to startup and shutdown.

(ii) For periods of startup, the kiln push rate and kiln exhaust temperature prior to the time the kiln exhaust reaches the minimum APCD inlet temperature (for a kiln with an APCD) or the kiln temperature profile is attained (for a kiln with no APCD).

(iii) For periods of shutdown, the kiln push rate and kiln exhaust temperature after the time the kiln exhaust falls below the minimum APCD inlet temperature (for a kiln with an APCD) or the kiln temperature profile is no longer maintained (for a kiln with no APCD).

(11) All site-specific parameters, temperature profiles, and procedures required to be established or developed according to the applicable work practice standards in Table 3(Attachment 5) to 40 CFR part 63 subpart JJJJJ.

Pursuant to 40 CFR 63.8490

Compliance Method: Compliance shall be assured by collecting and maintaining the required records as described

E4-18. What form and for how long must records be kept.

a) Your records must be in a form suitable and readily available for expeditious review, according to 40 CFR 63.10(b)(1).

(b) As specified in 40 CFR 63.10(b)(1), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

(c) You must keep each record onsite for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR 63.10(b)(1). You may keep the records offsite for the remaining 3 years.

Pursuant to 40 CFR 63.8495

Compliance Method: Compliance shall be assured by collecting and maintaining the required records as described

Other Requirements and Information

E4-19. Table 10 (Attachment 12) to 40 CFR part 63 subpart JJJJJ shows which parts of the General Provisions in 40 CFR 40 CFR 63.1 through 63.16 that apply to this facility.

Pursuant to 40 CFR 63.8505

Compliance Method: Compliance shall be assured by Responsible Official certification.

92-0052-01	Source Identification:	This source is comprised of a clay grinding operation where emissions are controlled by wet suppression and a raw material mixing operation.
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Conditions E5-1 through E5-3 apply to source 92-0052-01.
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- E5-1.** Combined particulate emissions from the grinding and mixing operation shall not exceed 11.4 lb per hour. The company has agreed to this particulate emission limit to avoid being classified as a major stationary source subject to PSD with a 250 TPY single criteria pollutant allowable for the facility.

TAPCR 1200-03-07-.01(5) and Agreement Letter dated November 14, 2011

Compliance Method: Compliance with this condition shall be assured through use of wet suppression at the clay grinding operation, as necessary to comply with the limitation if the moisture content of the process material falls below 13%.

- E5-2.** Visible emissions from the sources at source 01 clay grinding shall not exceed twenty percent (20%) opacity for an aggregate of more than five (5) minutes in any one (1) hour or more than twenty minutes in any twenty-four (24) hour period. This opacity shall be determined by Tennessee Visible Emission Evaluation Method 2 (aggregate count) as adopted by the Tennessee Air Pollution Control Board on August 24, 1984.

TAPCR 1200-03-05-.03(6) and TAPCR 1200-03-05-.01(1)

Compliance Method: Compliance with this opacity limitation shall be certified through utilization of the Division's Opacity Matrix dated June 18, 1996, amended September 11, 2013, using EPA Method 2 that is enclosed as **Attachment 1**.

If the magnitude and frequency of excursions reported by the permittee in the periodic monitoring for emissions is unsatisfactory to the Technical Secretary, this permit may be reopened to impose additional opacity monitoring requirements.

- E5-3. The permittee shall maintain a log of PM emissions for fee purposes as shown below:

ANNUAL PM EMISSION LOG FOR SOURCE 92-0052-01 (Clay Grinding) For Fiscal Year July-June

Log 1

Month/Year	PM Emissions (tons/month)
July	
August	

June.	
Total FY	

EQUATION FOR EMISSIONS LOG FOR SOURCE 92-0052-01:

PM Emission (tons/month) = Material processed (tons/month) * 0.025 (lb/ton).

Note: 0.025 (lb/ton) is the emission factor reported in AP-42 Table 11.3-2 which is included as Attachment 2.

TAPCR 1200-03-26(9)

92-0052-02	Source Identification:	This source is comprised of one (1) Tunnel Kiln #1 with a maximum production rate of
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9.82 tons of fired brick per hour. Heat input rate of 22.7 MMBtu/hr. Natural Gas as fuel for kiln. The exhaust from the kiln exits through stack (S-02) at 8835 DSCFM each without controls.

Minor Modification #1: Removal of three (3) gasification units from source/facility and deleting original permit conditions E5-2, E5-3, E5-7 & E5-8 corresponding to the units. Conditions have been re-numbered for continuity.

Conditions E6-1 through E6-8 applies to source 92-0052-02.

E6-1. a) The maximum brick production rate (PWR) for Tunnel Kiln #1 shall not exceed 9.82 tons of fired brick per hour (TPH). This rate includes green brick (pre-tunnel kiln) of 23,800 pounds per hour (lbs/hour).

Compliance method: Log #3 in Condition E6-2 shall be used to determine the monthly weighted average of fire brick produced (FBP) in tons per hour. This is calculated by dividing the total monthly FBP by the monthly kiln operating hours for each month.

b) The maximum heat input to the Tunnel Kiln #1 using natural gas shall not exceed 22.75 million Btu per hour (MMBtu/hr). This value will be calculated using the monthly-weighted average of fuel consumed, the calorific value of the respective fuel, and the average monthly Kiln operating hours.

Compliance method: A monthly weighted average of kiln heat input in MMBtu/hr is determined by completing the following log (Log #2) of natural gas used, total Btu used, and monthly kiln operating hours for each month.

Monthly Kiln #1 Heat Input Rate in MMBtu/hr

Log #2

Mon/year	Kiln hours	Nat. Gas Used (Scf)	Calorific BTU of NG	NG MMBtu Used	Total MMBtu Used	Monthly Avg. MMBtu/hr

E6-2. Particulate emissions from Tunnel Kiln #1 shall not exceed 11.4 lbs per hour at a kiln design capacity of 9.82 tons/hour. The permittee has agreed to this particulate emission limit to avoid being classified as a major stationary source subject to PSD with a 250 TPY single criteria pollutant allowable for the facility.

TAPCR 1200-03-07-.01(5) and Agreement letter dated November 14, 2011

Compliance Method: Compliance with this emission limitation shall be assured through recordkeeping. Operational parameters, including operating time and fired brick production, shall be maintained in the following Log #3. Particulate matter emissions shall be calculated and recorded in the log. This log shall be used to certify compliance with this condition and in the reporting requirements of Condition E2. Reports and certifications shall be submitted in accordance with Condition E2 of this Title V permit.

Monthly Log of Kiln Production Rate and PM Emissions for Source 92-0052-02

Log #3

MONTH/YEAR:

Day	Monthly Operating Hours	Monthly Fired Brick Production (tons)	Production Rate (tons/hr) average over a month	PM Emission Rate (lb/hr)
1				
2				
Etc.				
Monthly Total (hrs/month)		FBP (tons/month)	Monthly tons/monthly hrs	PM (Lb/hr)

EQUATIONS FOR DAILY LOG FOR SOURCE 92-0052-02:

- Monthly Operating Hours (hrs) = Sum of the daily operating hours of Tunnel Kiln 1.
- Fired Brick Production (tons) = Sum of the fired bricks produced Monthly by Tunnel Kiln 1 (tons).

3. Production Rate (tons/hr) = Monthly Fired Brick Production (tons) / Monthly operating hours.
4. PM Emission Rate (lb/hr) = Production Rate (tons) * PM Emission Factor (lb/ton) / monthly operating hours.
5. FBP (tons/month) = Sum of the monthly fired brick production (tons).

Note: 1. PM emission factor value of 0.96 lb/ton is obtained from AP-42 Brick and Structural Clay Product Manufacturing.
 2. The Division will require monthly reports as shown above. The Federal standard pursuant to 40CFR Part 63 Subpart JJJJ states that an existing tunnel kiln is one where a 12-month rolling average is less than 10 tons/hour of fired Products. Cumulative monthly logs can readily confirm this status if needed.

- E6-3.** Sulfur Dioxide (SO₂) emissions from both Tunnel Kiln #1 and Tunnel Kiln #2 shall not exceed 29 pounds per hour for each kiln for a combined total of 58 pounds per hour and 249 tons/year (for both kilns).

TAPCR 1200-03-14-.01(3): as stipulated in the letter of November 19, 2010.

Compliance Method: Compliance with this emission limitation shall be assured through use of natural gas, or equivalent fuel as well as from clay sulfur analysis report (Condition E6-5) and stack test results. For fee purposes, SO₂ emissions shall be calculated and recorded in the log required by Condition E6-8.

- E6-4.** Natural gas or comparable fuels with equivalent heating values and equal or lesser levels of contaminants of concern shall be used as fuel for this source.

Compliance Method: The permittee shall submit an annual compliance certification.

- E6-5.** Each quarter, that clay is processed in the kilns, the clay shall be analyzed for fluorides and Sulfur Content, using an approved protocol, as outlined in Condition E6-9 that is acceptable to the Technical Secretary. The clay analysis shall be representative of clay used in both Tunnel Kilns #1 and #2. The results of such analyses shall be submitted with the Semi-annual Report (SAR) to this Division.

- E6-6.** Visible emissions from all stacks at this facility shall not exhibit greater than twenty percent (20%) opacity, except for one (1) six-minute period in any one (1) hour period and for no more than four (4) six-minute periods in any twenty-four (24) hour period. Visible emissions shall be determined by EPA Method 9, as published in the current 40 CFR 60, Appendix A (six-minute average).

TAPCR 1200-03-05-.03(6) and TAPCR 1200-03-05-.01(1)

Compliance Method: Compliance with this opacity limitation shall be certified through utilization of the Division's Opacity Matrix dated June 18, 1996, amended September 11, 2013, using EPA Method 9 that is enclosed as **Attachment 1**.

If the magnitude and frequency of excursions reported by the permittee in the periodic monitoring for emissions is unsatisfactory to the Technical Secretary, this permit may be reopened to impose additional opacity monitoring requirements.

- E6-7.** 40 CFR part 63, subpart JJJJ (*new and existing brick & structural clay products (BSCP)*) indicates that the source is subject to 40 CFR part 63 subpart JJJJ for Small Kilns (less than 10 tons per hour (TPH) of fired brick). This source shall comply with all the applicable requirements of 40 CFR part 63 subpart JJJJ contained within conditions E4-1 through E4-19 by December 26, 2018.

- E6-8.** The permittee shall maintain a log of emissions as shown for the fee purposes.

Annual Emissions Log for Fee Purposes for Source 92-0052-02				Log #4	July - June:	
Month/Year	PM Emissions (tons/month)	SO ₂ Emissions (tons/month)	NO _x Emissions (tons/month)	VOC Emissions (tons/month)	HCl Emissions (tons/month)	HF Emissions (tons/month)
July						
August						
Etc						
June						
Total						

EQUATIONS FOR ANNUAL EMISSIONS LOG FOR SOURCE 92-0052-01:

1. PM Emissions (tons/month) = FBP (tons/month) * PM Emission Factor (lb/ton).

2. SO_2 Emission (tons/month) = FBP (tons/month) * SO_2 Emission Factor (lb/ton).
3. HCl Emission (tons/month) = FBP (tons/month) * HCl Emission Factor (lb/ton).
4. HF Emission (tons/month) = FBP (tons/month) * HF Emission Factor (lb/ton).

Note: 1. PM emission factor value of 0.96 lb/ton is obtained from AP-42 Brick and Structural Clay Product Manufacturing.
 2. SO_2 emission factor value of 0.67 lb/ton is obtained from AP-42 Brick and Structural Clay Product Manufacturing.
 3. HCl emission factor value of 0.17 lb/ton is obtained from AP-42 Brick and Structural Clay Product Manufacturing.
 4. HF emission factor value of 0.64 lb/ton was determined during the November 4, 1998 stack test.
 5. NO_x and VOC emissions are addressed in condition E1 which are based on maximum actual emissions and.

TAPCR 1200-03-26(9)

92-0052-03	Source Identification:	This source is comprised of one (1) Tunnel Kiln #2 with a maximum production rate of 9.82 tons of fired brick per hour. Heat input rate of 22.7 MMBtu/hr. Natural Gas as fuel for kiln. The exhaust from the kiln exits through stack (S-03) at DSCFM each without controls. Minor Modification #1: Removal of three (3) gasification units from source/facility and deleting original permit conditions E6-2, E6-3, E6-7 & E6-8. Conditions have been re-numbered for continuity.
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Conditions E7-1 through E7-8 applies to source 92-0052-03.

- E7-1.** a) The maximum brick production rate (PWR) for Tunnel Kiln #2 shall not exceed 9.82 tons of fired brick per hour (TPH). This rate includes green brick (pre-tunnel kiln) of 23,800 pounds per hour (lbs/hour).

Compliance method: Log #6 in Condition E7-2 shall be used to determine the monthly weighted average of fired brick produced (FBP) in tons per hour. This is calculated by dividing the total monthly of FBP by the monthly kiln operating hours for each month.

- b) The maximum heat input to the Tunnel Kiln #2 using natural gas shall not exceed 22.75 million Btu per hour (MMBtu/hr). This value will be calculated using the monthly-weighted average of fuel consumed, the calorific value of the respective fuel and the average monthly Kiln operating hours.

Compliance method: A monthly weighted average of kiln heat input in MMBtu/hr is determined by completing the following log of natural gas used, total Btu used, and monthly kiln operating hours for each month.

Monthly Kiln #2 Heat Input Rate in MMBtu/hr						Log #5
Mon/year	Kiln hours	Nat. Gas Used (Scf)	Calorific BTU of NG	NG MMBtu Used	Total MMBtu Used	Monthly Avg. MMBtu/hr

- E7-2.** Particulate emissions from Tunnel Kiln #2 shall not exceed 11.4 lbs/hour, at a kiln design capacity of 9.82 tons/hour. The permittee has agreed to this particulate emission limit to avoid being classified as a major stationary source subject to PSD with a 250 TPY single criteria pollutant allowable for the facility.

TAPCR 1200-03-07-.01(5) and Agreement letter dated November 14, 2011

Compliance Method: Compliance with this emission limitation shall be assured through recordkeeping. Operational parameters, including operating time and fired brick production, shall be maintained in the following Log #6. Particulate matter emissions shall be calculated and recorded in the log. This log shall be used to certify compliance with this condition and in the reporting requirements of Condition E2. Reports and certifications shall be submitted in accordance with Condition E2 of this Title V permit.

Monthly Log of Kiln Production Rate and PM Emissions for Source 92-0052-03

Log #6

Year: July – June:

Day	Monthly Operating Hours	Monthly Fired Brick Production (tons)	Production Rate (tons/hr) average over a month	PM Emission Rate (lb/hr)
1				
2				
Etc.				
Monthly Total (hrs/month)		FBP (tons/month)	Monthly tons/monthly hrs	PM (Lb/hr)

EQUATIONS FOR DAILY LOG FOR SOURCE 92-0052-03:

1. Monthly Operating Hours (hrs) = Sum of the daily operating hours of Tunnel Kiln #2.
2. Fired Brick Production (tons) = Sum of the fired bricks produced monthly by Tunnel Kiln #2 (tons).
3. Production Rate (tons/hr) = Monthly Fired Brick Production (tons) / monthly operating hours.
4. PM Emission Rate (lb/hr) = Production Rate (tons) * PM Emission Factor (lb/ton) / monthly operating hours.
5. FBP (tons/month) = Sum of the monthly fired brick production (tons) .

Note: 1. PM emission factor value of 0.96 lb/ton is obtained from AP-42 Brick and Structural Clay Product Manufacturing.
 2. The Division will require monthly reports as shown above. The Federal standard pursuant to 40 CFR Part 63 Subpart JJJJ states that an existing small tunnel kiln is one where a 12-month rolling average is less than 10 tons/hour of fired products. Cumulative monthly reports can readily confirm this status if needed.

- E7-3.** Sulfur Dioxide (SO₂) emissions from both Tunnel Kiln #2 (Source 03) and Tunnel Kiln #1 shall not exceed 28.5 pounds/hour for each kiln for a combined total of 57 pounds/hour and 249 tons/ year (for both kilns).

TAPCR 1200-03-14-.01(3): as stipulated in the letter of November 19, 2010.

Compliance Method: Compliance with this emission limitation shall be assured through use of natural gas, or equivalent fuel as well as from clay sulfur analysis report (Condition E6-5) and stack test results. For fee purposes, SO₂ emissions shall be calculated and recorded in the log required by Condition E7-8.

- E7-4.** Natural gas or comparable fuels with equivalent heating values and equal or lesser levels of contaminants of concern shall be used as fuel for this source.

Compliance Method: The permittee shall submit an annual compliance certification of the amount of each type of fuel used.

- E7-5.** Each quarter, that clay is processed in the kilns, the clay shall be analyzed for fluorides and Sulfur Content, using an approved protocol, as outlined in Condition E6-10, that is acceptable to the Technical Secretary. The clay analysis shall be representative of clay used in both Tunnel Kilns #1 and #2. The results of such analyses shall be submitted with the Semi-annual Report (SAR) to this Division.

- E7-6.** Visible emissions from all stacks at this facility shall not exhibit greater than twenty percent (20%) opacity, except for one (1) six-minute period in any one (1) hour period and for no more than four (4) six-minute periods in any twenty-four (24) hour period. Visible emissions shall be determined by EPA Method 9, as published in the current 40 CFR 60, Appendix A (six-minute average).

TAPCR 1200-03-05-.03(6) and TAPCR 1200-03-05-.01(1)

Compliance Method: Compliance with this opacity limitation shall be certified through utilization of the Division's Opacity Matrix dated June 18, 1996, amended September 11, 2013, using EPA Method 9 that is enclosed as **Attachment 1**.

If the magnitude and frequency of excursions reported by the permittee in the periodic monitoring for emissions is unsatisfactory to the Technical Secretary, this permit may be reopened to impose additional opacity monitoring requirements.

E7-7. 40 CFR part 63, subpart JJJJ (*new and existing brick & structural clay products (BSCP)*) indicates that the source is now subject to 40 CFR part 63 subpart JJJJ for small Kilns (less than 10 tons per hour (TPH) of fired brick). This source shall comply with all the applicable requirements of 40 CFR part 63 subpart JJJJ contained within conditions E4-1 through E4-19 by December 26, 2018.

E7-8. The permittee shall maintain a log of emissions as shown for the fee purposes.

Annual Emissions Log for Fee Purposes For Source 92-0052-03				Log 7	July - June:	
Month/Year	PM Emission (tons/month)	SO ₂ Emission (tons/month)	NO _x Emission (tons/month)	VOC Emission (tons/month)	HCL Emission (tons/month)	HF Emission (tons/month)
July						
August						
Etc						
June						
Total						

EQUATIONS FOR ANNUAL EMISSIONS LOG FOR SOURCE 92-0052-03:

1. PM Emissions (tons/month) = FBP (tons/month) * PM Emission Factor (lb/ton).
2. SO₂ Emission (tons/month) = FBP (tons/month) * SO₂ Emission Factor (lb/ton).
3. HCl Emission (tons/month) = FBP (tons/month) * HCl Emission Factor (lb/ton).
4. HF Emission (tons/month) = FBP (tons/month) * HF Emission Factor (lb/ton).

Note: 1. PM emission factor value of 0.96 lb/ton is obtained from AP-42 Brick and Structural Clay Product Manufacturing.
 2. SO₂ emission factor value of 0.67 lb/ton is obtained from AP-42 Brick and Structural Clay Product Manufacturing.
 3. HCl emission factor value of 0.17 lb/ton is obtained from AP-42 Brick and Structural Clay Product Manufacturing.
 4. HF emission factor value of 0.64 lb/ton was determined during the November 4, 1998 stack test.
 5. NO_x and VOC emissions are addressed in Condition E1 which are based on maximum actual emissions and an emission factor in lbs/ton.

TAPCR 1200-03-26(9)

(End of Permit #572182)

ATTACHMENT 1

OPACITY MATRIX DECISION TREE for VISIBLE EMISSION EVALUATION TVEE METHOD 2

Dated JUNE 18, 1996; Amended September 11, 2013

And

VISIBLE EMISSION EVALUATION EPA METHOD 9

Dated JUNE 18, 1996; Amended September 11, 2013

**Decision Tree PM for Opacity for
Sources Subject to Rule 1200-03-05-.01
Utilizing TVEE Method 2**

Notes:

PM = Periodic Monitoring required by 1200-03-09-.02(11)(e)(iii).

This Decision Tree outlines the criteria by which major sources can meet the periodic monitoring and testing requirements of Title V for demonstrating compliance with the visible emission standard in Rule 1200-03-05-.01. It is not intended to determine compliance requirements for EPA's Compliance Assurance Monitoring (CAM) Rule (formerly referred to as Enhanced Monitoring – Proposed 40 CFR 64).

Examine each emission unit using this Decision Tree to determine the PMT required.

Use of continuous emission monitoring systems eliminates the need to do any additional periodic monitoring.

Visible Emission Evaluations (VEEs) are to be conducted utilizing Tennessee Visible Emission Evaluation Method 2. The observer must be properly certified according to the criteria specified in EPA Method 9 to conduct TVEE Method 2 evaluations.

Typical Pollutants

Particulates, VOC, CO, SO₂, NO_x, HCl, HF, HBr, Ammonia, and Methane.

Initial observations are to be repeated within 90 days of startup of a modified source, if a new construction permit is issued for modification of the source.

A VEE conducted by TAPCD personnel after the Title V permit is issued will also constitute an initial reading.

Reader Error

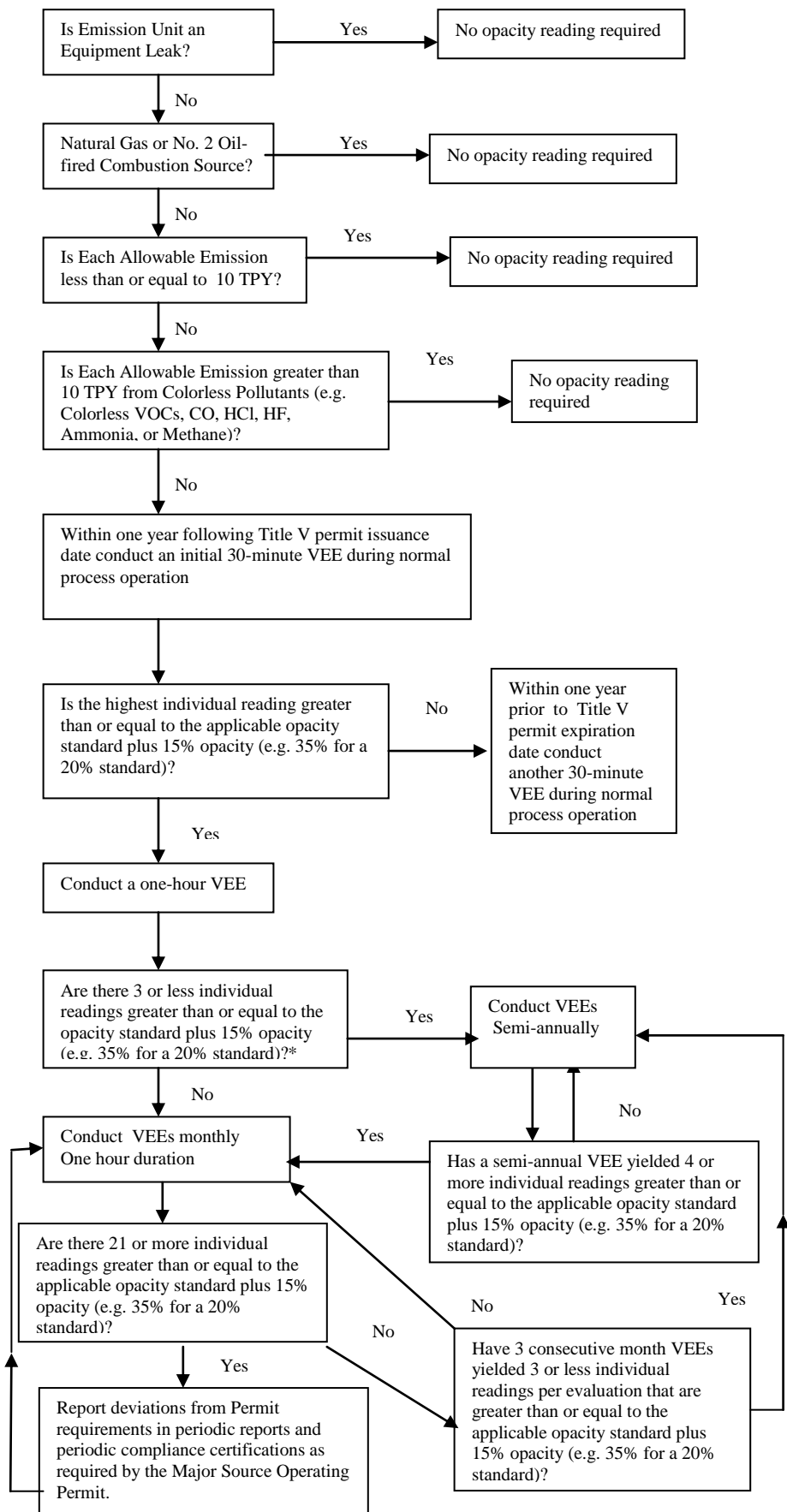
TVEE Method 2: The TAPCD declares non-compliance when 21 observations are read at the standard plus 15% opacity (e.g. 35% for a 20% standard).

*The rationale for this is the fact that Rule 1200-03-05-.01 allows for an exemption of 5 minutes (20 readings) per hour and up to 20 minutes (80 readings) per day. With 4 or more excessive individual readings per hour the possibility of a daily exceedance exists.

Note: A company could mutually agree to have all of its sources regulated by EPA Method 9. Caution: Agreement to use Method 9 could potentially place some sources in non-compliance with visible emission standards. Please be sure before you agree.

Dated June 18, 1996

Amended September 11, 2013



Decision Tree PM for Opacity for Sources Utilizing EPA Method 9*

Notes:

PM = Periodic Monitoring required by 1200-03-09-.02(11)(e)(iii).

This Decision Tree outlines the criteria by which major sources can meet the periodic monitoring and testing requirements of Title V for demonstrating compliance with the visible emission standards set forth in the permit. It is not intended to determine compliance requirements for EPA's Compliance Assurance Monitoring (CAM) Rule (formerly referred to as Enhanced Monitoring – Proposed 40 CFR 64).

Examine each emission unit using this Decision Tree to determine the PM required.*

Use of continuous emission monitoring systems eliminates the need to do any additional periodic monitoring.

Visible Emission Evaluations (VEEs) are to be conducted utilizing EPA Method 9. The observer must be properly certified to conduct valid evaluations.

Typical Pollutants

Particulates, VOC, CO, SO₂, NO_x, HCl, HF, HBr, Ammonia, and Methane.

Initial observations are to be repeated within 90 days of startup of a modified source, if a new construction permit is issued for modification of the source.

A VEE conducted by TAPCD personnel after the Title V permit is issued will also constitute an initial reading.

Reader Error

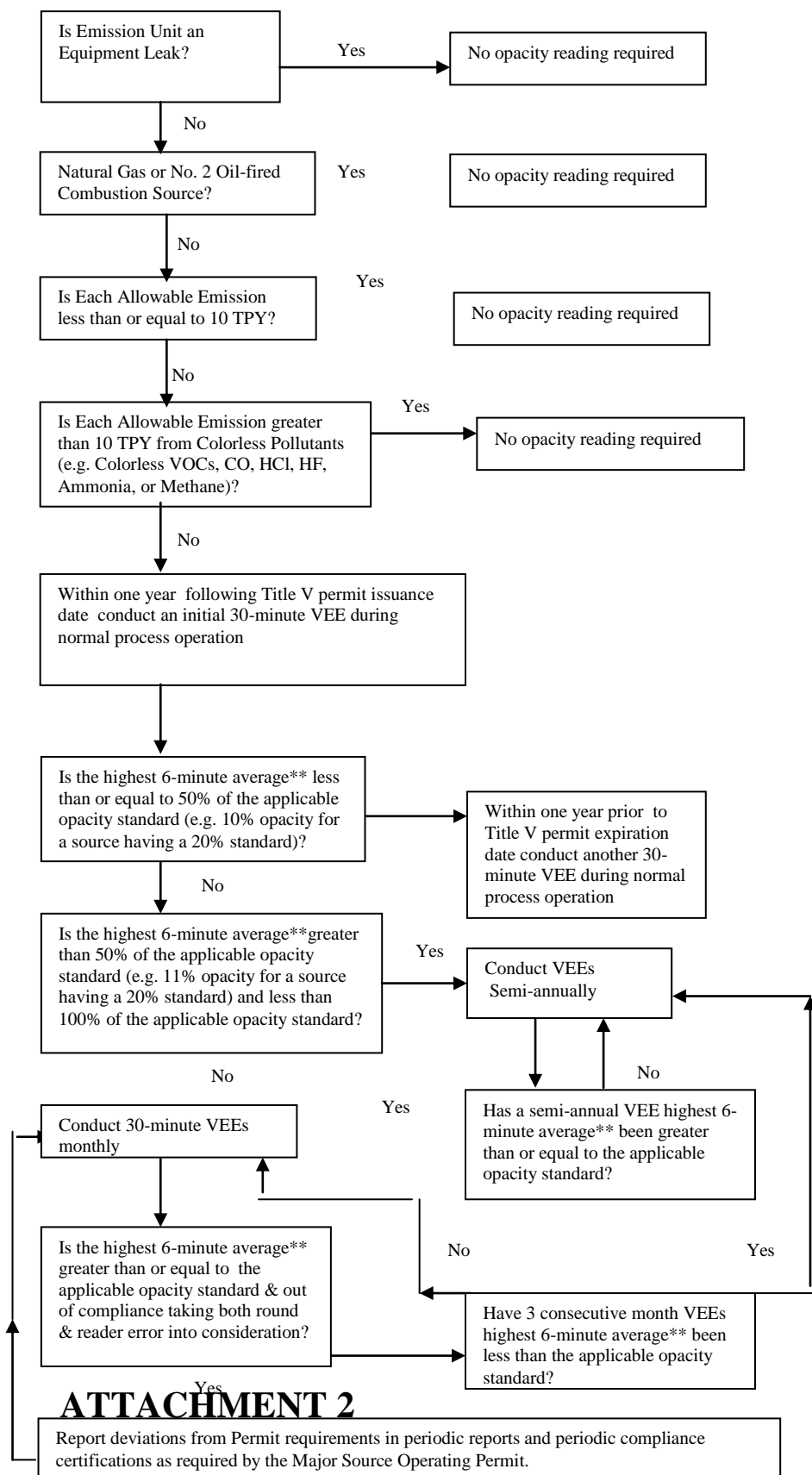
EPA Method 9, Non-NSPS or NESHAPS stipulated opacity standards: The TAPCD guidance is to declare non-compliance when the highest six-minute average** exceeds the standard plus 6.8% opacity (e.g. 26.8% for a 20% standard).

EPA Method 9, NSPS or NESHAPS stipulate opacity standards: EPA guidance is to allow only engineering round. No allowance for reader error is given.

*Not applicable to Asbestos manufacturing subject to 40 CFR 61.142

**Or second highest six-minute average, if the source has an exemption period stipulated in either the regulations or in the permit.

DATED JUNE 18, 1996
AMENDED SEPTEMBER 11, 2013



**AP-42, 5th Edition (dated 8/97), Section 11.3 - Brick and Structural Clay
Product Manufacturing**

Table 11.3-1. PARTICULATE MATTER EMISSION FACTORS FOR BRICK MANUFACTURING OPERATIONS^a

Source	Filterable PM ^b						Condensible PM ^c			
	PM	EMISSION FACTOR RATING	PM-10	EMISSION FACTOR RATING	PM-2.5	EMISSION FACTOR RATING	Inorganic	EMISSION FACTOR RATING	Organic	EMISSION FACTOR RATING
Primary crusher with fabric filter ^d (SCC 3-05-003-40)	ND	NA	0.00059	E	ND	NA	NA	NA	NA	NA
Grinding and screening operations (SCC 3-05-003-02)										
processing wet material ^f	0.025	E	0.0023	E	ND	NA	NA	NA	NA	NA
processing dry material ^e	8.5	E	0.53	E	ND	NA	NA	NA	NA	NA
with fabric filter ^g	0.0062	E	0.0032	E	ND	NA	NA	NA	NA	NA
Extrusion line with fabric filter ^h (SCC 3-05-003-42)	ND	NA	0.0036	E	ND	NA	NA	NA	NA	NA
Brick dryer (SCC 3-05-003-50, -51)	0.077 ^j	E	ND	NA	ND	NA	0.11 ^k	E	ND	NA
Natural gas-fired kiln (SCC 3-05-003-11)	0.37 ^m	C	0.28 ⁿ	E	ND	NA	0.48 ^o	D	0.11 ^q	D
Coal-fired kiln (SCC 3-05-003-13)										
uncontrolled	1.2 ^r	A	0.76 ^s	C	0.28 ^t	D	0.48 ^u	D	0.11 ^q	D
with fabric filter	0.043 ^v	E	ND	NA	ND	NA	0.48 ^u	D	0.11 ^q	D
Sawdust-fired kiln (SCC 3-05-003-10)	0.34 ^w	D	0.26 ^x	D	0.16 ^x	D	0.48 ^u	D	0.11 ^q	D
Sawdust-fired kiln and sawdust dryer ^y (SCC 3-05-003-61)	1.3	E	0.25	E	ND	NA	0.013	E	0.043	E
Natural gas-fired kiln firing structural clay tile ^z (SCC 3-05-003-70)	1.0	E	ND	NA	ND	NA	ND	NA	ND	NA

^a Emission factor units are lb of pollutant per ton of fired bricks produced unless noted. Factors represent uncontrolled emissions unless noted.

SCC = Source Classification Code. ND = no data. NA = not applicable. To convert from lb/ton to kg/Mg, multiply by 0.5. Total PM can be calculated as the sum of filterable PM and condensible inorganic and organic PM. Total PM-10 can be calculated as the sum of filterable PM-10 and condensible inorganic and organic PM. Total PM-2.5 can be calculated as the sum of filterable PM-2.5 and condensible inorganic and organic PM.

^b Filterable PM is that PM collected on or prior to the filter of an EPA Method 5 (or equivalent) sampling train.

Table 11.3-2. EMISSION FACTORS FOR TOTAL PM, TOTAL PM-10, AND TOTAL PM-2.5
FROM BRICK MANUFACTURING OPERATIONS^a

Source	Total PM ^b					
	PM	EMISSION FACTOR RATING	PM-b	EMISSION FACTOR RATING	PM-2.5	EMISSION FACTOR RATING
Primary crusher with fabric filter (SCC 3-05-003-40)	ND	NA	0.00059	E	ND	NA
Grinding and screening operations (SCC 3-05-003-02)						
processing dry material ^c	8.5	E	0.53	E	ND	NA
processing wet material ^d	0.025	E	0.0023	E	ND	NA
with fabric filter ^e	0.0062	E	0.0032	E	ND	NA
Extrusion line with fabric filter ^f (SCC 3-05-003-42)	ND	NA	0.0036	E	ND	NA
Natural gas-fired kiln (SCC 3-05-003-11)	0.96	D	0.87	D	ND	NA
Coal-fired kiln (SCC 3-05-003-13)						
uncontrolled	1.8	B	1.4	C	0.87	D
with fabric filter	0.63	E	ND	NA	ND	NA
Sawdust-fired kiln (SCC 3-05-003-10)	0.93	D	0.85	D	0.75	D
Sawdust-fired kiln and sawdust dryers ^g (SCC_3-05-003-6 1)	1.4	E	0.31	E	ND	NA

^a Emission factor units are lb of pollutant per ton of fired bricks produced unless noted. Factors represent uncontrolled emissions unless noted. SCC = Source Classification Code. ND = no data. NA = not applicable. To convert from lb/ton to kg/Mg, multiply by 0.5.

^b Total PM emission factors are the sum of filterable PM and condensible inorganic and organic PM emission factors from Table 11.3-1. Total PM-10 emission factors are the sum of filterable PM-10 and condensible inorganic and organic PM emission factors from Table 11.3-1. Total PM-2.5 emission factors are the sum of filterable PM-2.5 and condensible inorganic and organic PM emission factors from Table 11.3-1.

^c Emission factor units are lb of pollutant per ton of raw material processed. Grinding and screening operations are typically housed in large buildings that can be fully or partially enclosed. Factor is based on measurements at the inlet to a fabric filter and does not take into account the effect of the building enclosure. Based on a raw material moisture content of 4 percent.

^d Emission factor units are lb of pollutant per ton of raw material processed. Based on a raw material moisture content of 13 percent. Grinding and screening operations are typically housed in large buildings that can be fully or partially enclosed.

^e Emission factor units are lb of pollutant per ton of raw material processed. Grinding and screening operations are typically housed in large buildings that can be fully or partially enclosed.

^f This emission factor is not applicable to typical extrusion lines. Extrusion line with several conveyor drop points processing material with a 5-9 percent moisture content.

^g Sawdust dryer heated with the exhaust stream from a sawdust-fired kiln.

Table 11.3-3. EMISSION FACTORS FOR BRICK MANUFACTURING OPERATIONS ^a

Source	SO ₂ ^b	EMISSION FACTOR RATING	SO ₃	EMISSION FACTOR RATING	NO _x	EMISSION FACTOR RATING	CO	EMISSION FACTOR RATING	CO ₂	EMISSION FACTOR RATING
Brick dryer with supplemental gas burner ^f (SCC 3-05-003-51)	NA	NA	NA	NA	0.098 ^d	E	0.31 ^e	E	71 ^f	E
Natural gas-fired kiln (SCC 3-05-003-11)	0.67 ^g	C	0.11 ^h	D	0.35 ^j	C	1.2 ^k	C	400 ^m	B
Natural gas-fired kiln firing high -sulfur material ⁿ (SCC 3-05-003-22)										
uncontrolled	5.1 ^p	D	ND	NA	0.35 ^j	C	1.2 ^k	C	400 ^m	B
with medium-efficiency wet scrubber ^q	1.0 ^p	C	ND	NA	0.35 ^j	C	1.2 ^k	C	400 ^m	B
with high-efficiency packed-bed scrubber ^r	0.0049 ^r	C	ND	NA	0.35 ^j	C		C	400 ^m	B
Coal-fired kiln (SCC 3-05-003-13)	1.2 ^s	D	ND	NA	0.51 ^t	D	0.80 ^t	D	300 ^u	C
Sawdust-fired kiln (SCC 3-05-003-10)	0.67 ^g	C	0.11 ^h	D	0.37 ^v	E	1.6 ^x	D	490 ^x	D

^a Emission factor units are lb of pollutant per ton of fired bricks produced. Factors represent uncontrolled emissions unless noted. SCC = Source Classification Code. ND = no data. NA = not applicable. To convert from lb/ton to kg/Mg, multiply by 0.5.

^b Because of highly variable percentages of sulfur in raw materials, SO₂ emissions can be more accurately estimated using mass balance procedures. Assuming that all of the sulfur in the raw material is released as SO₂ during firing, each lb of sulfur in the raw material will result in 2 lb of SO₂ emissions. The amount of SO₂ released may be reduced by contact with alkaline components of the raw materials or additives. To develop emission factors based on mass balance, the sulfur percentage should be presented as a percentage of dry raw material, because the emission factor is based on brick production (dry) rather than raw material (wet) use. Because SO₃ emissions are generally a small percentage of total sulfur oxide (SO_x) emissions, assume that all SO_x is SO₂ when performing mass balance calculations. For coal-fired kilns, the contribution of the coal to SO₂ emissions must also be accounted for when performing mass balance calculations.

Table 11.3-1. (cont.).

^c	Condensible PM is that PM collected in the impinger portion of an EPA Method 5 (or equivalent) sampling train or by EPA Method 202.
^d	Reference 29.
^e	Reference 8. Emission factor units are lb of pollutant per ton of raw material processed. Grinding and screening operations are typically housed in large buildings that can be fully or partially enclosed. Factor is based on measurements at the inlet to a fabric filter and does not take into account the effect of the building enclosure. Based on a raw material moisture content of 4 percent.
^f	Reference 11. Emission factor units are lb of pollutant per ton of raw material processed. Based on a raw material moisture content of 13 percent. Grinding and screening operations are typically housed in large buildings that can be fully or partially enclosed.
^g	References 8-9. Emission factor units are lb of pollutant per ton of raw material processed. Grinding and screening operations are typically housed in large buildings that can be fully or partially enclosed. Average raw material moisture content of 6.5 percent.
^h	Reference 29. Extrusion line with several conveyor drop points processing material with a 5-9 percent moisture content. This emission factor is not applicable to typical extrusion lines.
ⁱ	Reference 21,36-37.
^j	Reference 21.
^k	References 8,12,15,22,25-26,29-30,32-34,36-37. Includes data from a kiln controlled with a dry scrubber.
^l	Reference 25.
^m	References 8-9,11,21,25,29-30,33-34.
ⁿ	References 8-9,11,25,29-30.
^o	References 9,13-14,17-18,21.
^p	References 9,13-14,17-18,21.
^q	Reference 21.
^r	Fabric filter is not expected to control condensible PM emissions. Therefore, the uncontrolled condensible PM emission factors are used.
^s	Reference 19.
^t	References 11,23.
^u	References 11,20,23.
^v	Reference 11. Sawdust dryer heated with the exhaust stream from a sawdust-fired kiln.
	References 27-28.

Table 11.3-4. EMISSION FACTORS FOR HYDROGEN FLUORIDE, TOTAL FLUORIDES, AND HYDROGEN CHLORIDE FROM BRICK MANUFACTURING OPERATIONS^a

Source	HF ^b	EMISSION FACTOR RATING	Total fluorides ^c	EMISSION FACTOR RATING	HCl ^d	EMISSION FACTOR RATING
Sawdust- or natural gas-fired tunnel kiln (SCC 3-05-003-10,-11)						
uncontrolled	0.37 ^e	C	0.59 ^f	E	0.17 ^g	D
with dry scrubber ^h	ND	NA	0.028	C	ND	NA
with medium-efficiency wet scrubber ^j	ND	NA	0.18	C	ND	NA
with high-efficiency packed-bed scrubber ^k	ND	NA	0.0013	C	ND	NA
Coal-fired tunnel kiln ^m (SCC 3-05-003-13)	0.17	D	ND	NA	ND	NA
Sawdust-fired kiln and sawdust dryer ⁿ (SCC 3-05-003-61)	0.18	E	ND	NA	ND	NA

^a Emission factor units are lb of pollutant per ton of fired product. Factors represent uncontrolled emissions unless noted. To convert from lb/ton to kg/Mg, multiply by 0.5. SCC = Source Classification Code. ND = no data. NA = not applicable.

^b Hydrogen fluoride measured using an EPA Method 26A or equivalent sampling train.

^c Total fluorides measured using an EPA Method 13B or equivalent sampling train.

^d Hydrogen chloride measured using an EPA Method 26A or equivalent sampling train.

^e References 8,11,26-27,32,34. Factor includes data from kilns firing structural clay tile. Data from kilns firing natural gas and sawdust are averaged together because fuel type (except for coal) does not appear to affect HF emissions. However, the raw material fluoride content does effect HF emissions. A mass balance on fluoride will provide a better estimate of emissions for individual facilities. Assuming that all of the fluorine in the raw material is released as HF, each lb of fluorine will result in 1.05 lb of HF emissions.

^f Reference 26. Factor is 1.6 times the HF factor.

^g References 8,26.

^h References 22,33-34. Kiln firing material with a high fluorine content. Dry scrubber using limestone as a sorption medium.

^j Reference 29. Medium-efficiency wet scrubber using a soda-ash/water solution (maintained at pH 7) as the scrubbing liquid. The design of this scrubber is not typical. Kiln firing material with a high fluorine content.

^k Reference 30. High-efficiency packed bed scrubber with soda-ash/water solution circulated through the packing section. Kiln firing material with a high fluorine content (uncontrolled emission factor of 2.1 lb/ton).

^m References 9,26.

ⁿ Reference 11. Sawdust dryer heated with the exhaust stream from a sawdust-fired kiln.

ATTACHMENT 3

Table 1 to Subpart JJJJJ of Part 63—Emission Limits

Table 1Subpart JJJJJ of Part 63—Emission Limits

For each . . .	You must meet the following emission limits . . .	Or you must comply with the following . . .
1. Collection of all tunnel kilns at facility, including all process streams	HF, HCl, and Cl ₂ emissions must not exceed 26 kg/hr (57 lb/hr) HCl equivalent, under the health-based standard, as determined using Equations 2 and 3	Not applicable.
2. Existing large tunnel kiln (design capacity ≥10 tons per hour (tph) of fired product), including all process streams	a. PM emissions must not exceed 0.018 kg/Mg (0.036 lb/ton) of fired product	i. PM emissions must not exceed 6.6 mg/dscm (0.0029 gr/dscf) at 17% O ₂ ; or ii. Non-Hg HAP metals emissions must not exceed 0.0026 kg/hr (0.0057 lb/hr).
	b. Hg emissions must not exceed 2.1 E-05 kilogram per megagram (kg/Mg) (4.1 E-05 pound per ton (lb/ton)) of fired product	i. Hg emissions must not exceed 7.7 micrograms per dry standard cubic meter (µg/dscm) at 17% O ₂ ; or
		ii. Hg emissions must not exceed 2.5 E-04 kg/hr (5.5 E-04 lb/hr).
3. Existing small tunnel kiln (design capacity <10 tph of fired product), including all process streams	a. PM emissions must not exceed 0.19 kg/Mg (0.37 lb/ton) of fired product	i. PM emissions must not exceed 4.8 mg/dscm (0.0021 gr/dscf) at 17% O ₂ ; or ii. Non-Hg HAP metals emissions must not exceed 0.047 kg/hr (0.11 lb/hr).
	b. Hg emissions must not exceed 1.7 E-04 kg/Mg (3.3 E-04 lb/ton) of fired product	i. Hg emissions must not exceed 91 µg/dscm at 17% O ₂ ; or
		ii. Hg emissions must not exceed 8.5 E-04 kg/hr (0.0019 lb/hr).
4. New or reconstructed large tunnel kiln (design capacity ≥10 tph of fired product), including all process streams	a. PM emissions must not exceed 0.0089 kg/Mg (0.018 lb/ton) of fired product.	i. PM emissions must not exceed 3.2 mg/dscm (0.0014 gr/dscf) at 17% O ₂ ; or ii. Non-Hg HAP metals emissions must not exceed 0.0026 kg/hr (0.0057 lb/hr) of fired product.
	b. Hg emissions must not exceed 1.4 E-05 kg/Mg (2.8 E-05 lb/ton) of fired product	i. Hg emissions must not exceed 6.2 µg/dscm at 17% O ₂ .
		ii. Hg emissions must not exceed 1.6 E-04 kg/hr (3.4 E-04 lb/hr).
5. New or reconstructed small tunnel kiln (design capacity <10 tph of fired product), including all process streams	a. PM emissions must not exceed 0.015 kg/Mg (0.030 lb/ton) of fired product	i. PM emissions must not exceed 4.7 mg/dscm (0.0021 gr/dscf) at 17% O ₂ ; or ii. Non-Hg HAP metals emissions

		must not exceed 0.047 kg/hr (0.11 lb/hr) of fired product.
	b. Hg emissions must not exceed 1.7 E-04 kg/Mg (3.3 E-04 lb/ton) of fired product	i. Hg emissions must not exceed 91 µg/dscm at 17% O ₂ .
		ii. Hg emissions must not exceed 8.5 E-04 kg/hr (0.0019 lb/hr).

ATTACHMENT 4

Table 2 to Subpart JJJJJ of Part 63—Operating Limits

Table 2 to Subpart JJJJJ of Part 63—Operating Limits

As stated in §63.8405, you must meet each operating limit in the following table that applies to you:

For each . . .	You must . . .
1. Tunnel kiln equipped with a DLA	a. Maintain the average pressure drop across the DLA for each 3-hour block period at or above the average pressure drop established during the HF/HCl/Cl ₂ performance test; or, if you are monitoring the bypass stack damper position, initiate corrective action within 1 hour after the bypass damper is opened allowing the kiln exhaust gas to bypass the DLA and complete corrective action in accordance with your OM&M plan; and
	b. Maintain an adequate amount of limestone in the limestone hopper, storage bin (located at the top of the DLA), and DLA at all times; maintain the limestone feeder setting (on a per ton of fired product basis) at or above the level established during the HF/HCl/Cl ₂ performance test in which compliance was demonstrated; and
	c. Use the same grade of limestone from the same source as was used during the HF/HCl/Cl ₂ performance test in which compliance was demonstrated; maintain records of the source and grade of limestone; and
	d. Maintain no VE from the DLA stack.
2. Tunnel kiln equipped with a DIFF or DLS/FF	a. If you use a bag leak detection system, initiate corrective action within 1 hour of a bag leak detection system alarm and complete corrective actions in accordance with your OM&M plan; operate and maintain the fabric filter such that the alarm is not engaged for more than 5 percent of the total operating time in a 6-month block reporting period; or maintain no VE from the DIFF or DLS/FF stack; and
	b. Maintain free-flowing lime in the feed hopper or silo and to the APCD at all times for continuous injection systems; maintain the feeder setting (on a per ton of fired product basis) at or above the level established during the HF/HCl/Cl ₂ performance test for continuous injection systems in which compliance was demonstrated.
3. Tunnel kiln equipped with a WS	a. Maintain the average scrubber liquid pH for each 3-hour block period at or above the average scrubber liquid pH established during the HF/HCl/Cl ₂ performance test in which compliance was demonstrated; and
	b. Maintain the average scrubber liquid flow rate for each 3-hour block period at or above the highest average scrubber liquid flow rate established during the HF/HCl/Cl ₂ and PM/non-Hg HAP metals performance tests in which compliance was demonstrated.
4. Tunnel kiln equipped with an ACI system	Maintain the average carbon flow rate for each 3-hour block period at or above the average carbon flow rate established during the Hg performance test in which compliance was demonstrated.
5. Tunnel kiln with no add-on control	a. Maintain no VE from the stack. b. Maintain the kiln process rate at or below the kiln process rate determined according to §63.8445(g)(1).

ATTACHMENT 5

Table 3 to Subpart JJJJJ of Part 63—Work Practice Standards

Table 3 to Subpart JJJJJ of Part 63—Work Practice Standards

As stated in §63.8405, you must meet each work practice standard in the following table that applies to you:

For each . . .	You must . . .	According to the following requirements . . .
1. Existing, new or reconstructed periodic kiln	a. Minimize HAP emissions	i. Develop and use a designed firing time and temperature cycle for each periodic kiln. You must either program the time and temperature cycle into your kiln or track each step on a log sheet; and
		ii. Label each periodic kiln with the maximum load (in tons) of product that can be fired in the kiln during a single firing cycle; and
		iii. For each firing load, document the total tonnage of product placed in the kiln to ensure that it is not greater than the maximum load identified in item 1b; and
		iv. Develop and follow maintenance procedures for each kiln that, at a minimum, specify the frequency of inspection and maintenance of temperature monitoring devices, controls that regulate air-to-fuel ratios, and controls that regulate firing cycles; and
		v. Develop and maintain records for each periodic kiln, as specified in §63.8490.
2. Existing, new or reconstructed tunnel kiln	a. Minimize dioxin/furan emissions	i. Maintain and inspect the burners and associated combustion controls (as applicable); and
		ii. Tune the specific burner type to optimize combustion.
3. Existing, new or reconstructed tunnel kiln during periods of startup	a. Minimize HAP emissions	i. Establish the startup push rate for each kiln, the minimum APCD inlet temperature for each APCD, and temperature profile for each kiln without an APCD and include them in your first compliance report, as specified in §63.8485(c)(8); and
		ii. After initial charging of the kiln with loaded kiln cars, remain at or below the startup push rate for the kiln until the kiln exhaust reaches the minimum APCD inlet temperature for a kiln with an APCD or until the kiln temperature profile is attained for a kiln with no APCD; and
		iii. If your kiln has an APCD, begin venting the exhaust from the kiln through the APCD by the time the kiln exhaust temperature reaches the minimum APCD inlet temperature.
4. Existing, new or reconstructed tunnel kiln during periods of shutdown	a. Minimize HAP emissions	i. Do not push loaded kiln cars into the kiln once the kiln exhaust temperature falls below the minimum APCD inlet temperature if the kiln is controlled by an APCD or when the kiln temperature profile is no longer maintained for an uncontrolled kiln; and
		ii. If your kiln has an APCD, continue to vent the exhaust from the kiln through the APCD until the kiln exhaust temperature falls

		below the minimum inlet temperature for the APCD.
5. Existing, new or reconstructed tunnel kiln during periods of routine control device maintenance	a. Minimize HAP emissions.	i. Develop and use a temperature profile for each kiln; and ii. Develop and follow maintenance procedures for each kiln that, at a minimum, specify the frequency of inspection and maintenance of temperature monitoring devices and controls that regulate air-to-fuel ratios; and
		iii. Develop and maintain records for each kiln, as specified in §63.8490(a)(3).

As stated in §63.8445, you must conduct each performance test in the following table that applies to you:

ATTACHMENT 6

Table 4 to Subpart JJJJJ of Part 63—Requirements for Performance Tests

Table 4 to Subpart JJJJJ of Part 63—Requirements for Performance Tests

As stated in §63.8445, you must conduct each performance test in the following table that applies to you:

For each . . .	You must . . .	Using . . .	According to the following requirements . . .
1. Tunnel kiln	a. Select locations of sampling ports and the number of traverse points	Method 1 or 1A of 40 CFR part 60, appendix A-1	Sampling sites must be located at the outlet of the APCD and prior to any releases to the atmosphere for all affected sources.
	b. Determine velocities and volumetric flow rate	Method 2 of 40 CFR part 60, appendix A-1	You may use Method 2A, 2C, 2D, or 2F of 40 CFR part 60, appendix A-1, or Method 2G of 40 CFR part 60, appendix A-2, as appropriate, as an alternative to using Method 2 of 40 CFR part 60, appendix A-1.
	c. Conduct gas molecular weight analysis	Method 3 of 40 CFR part 60, appendix A-2	You may use Method 3A or 3B of 40 CFR part 60, appendix A-2, as appropriate, as an alternative to using Method 3 of 40 CFR part 60, appendix A-2. ANSI/ASME PTC 19.10-1981 (incorporated by reference, see §63.14) may be used as an alternative to the manual procedures (but not the instrumental procedures) in Methods 3A and 3B.
	d. Measure moisture content of the stack gas	Method 4 of 40 CFR part 60, appendix A-3	
	e. Measure HF, HCl and Cl ₂ emissions	i. Method 26A of 40 CFR part 60, appendix A-8; or	You may use Method 26 of 40 CFR part 60, appendix A-8, as an alternative to using Method 26A of 40 CFR part 60, appendix A-8, when no acid PM (e.g., HF or HCl dissolved in water droplets emitted by sources controlled by a WS) is present. ASTM D6735-01 (Reapproved 2009) (incorporated by reference, see §63.14) may be used as an alternative to Methods 26 and 26A.
		ii. Method 320 of appendix A of this part	When using Method 320 of appendix A of this part, you must follow the analyte spiking procedures of section 13 of Method 320 of appendix A of this part, unless you can demonstrate that the complete spiking procedure has been conducted at a similar source. ASTM D6348-03 (Reapproved 2010) (incorporated by reference, see §63.14) may be used as an alternative to Method 320 if the test plan preparation and implementation in Annexes A1-A8 are mandatory and the %R in Annex A5 is

			determined for each target analyte.
	f. Measure PM emissions or non-Hg HAP metals	i. For PM only: Method 5 of 40 CFR part 60, appendix A-3; or	
		ii. For PM or non-Hg HAP metals: Method 29 of 40 CFR part 60, appendix A-8	
	g. Measure Hg emissions	Method 29 of 40 CFR part 60, appendix A-8	ASTM D6784-02 (Reapproved 2008) (incorporated by reference, see §63.14) may be used as an alternative to Method 29 (portion for Hg only).
2. Tunnel kiln with no add-on control	Establish the operating limit(s) for kiln process rate if the total facility maximum potential HCl-equivalent emissions are greater than the HCl-equivalent limit in Table 1 to this subpart	HCl-equivalent limit in Table 1 to this subpart and emissions and production data from the HF/HCl/Cl ₂ performance test	Using the procedures in §63.8445(g)(1), you must determine the maximum process rate(s) for your kiln(s) that would ensure total facility maximum potential HCl-equivalent emissions remain at or below the HCl-equivalent limit in Table 1 to this subpart. The maximum process rate(s) would become your site-specific process rate operating limit(s).
3. Tunnel kiln that is complying with PM and/or Hg production-based emission limits	Determine the production rate during each PM/Hg test run in order to determine compliance with PM and/or Hg production-based emission limits	Production data collected during the PM/Hg performance tests (e.g., no. of pushes per hour, no. of bricks per kiln car, weight of a typical fired brick)	You must measure and record the production rate, on a fired-product basis, of the affected source for each of the three test runs.
4. Tunnel kiln equipped with a DLA	a. Establish the operating limit for the average pressure drop across the DLA	Data from the pressure drop measurement device during the HF/HCl/Cl ₂ performance test	You must continuously measure the pressure drop across the DLA, determine and record the block average pressure drop values for the three test runs, and determine and record the 3-hour block average of the recorded pressure drop measurements for the three test runs. The average of the three test runs establishes your minimum site-specific pressure drop operating limit.
	b. Establish the operating limit for the limestone feeder setting	Data from the limestone feeder during the HF/HCl/Cl ₂ performance test	You must ensure that you maintain an adequate amount of limestone in the limestone hopper, storage bin (located at the top of the DLA), and DLA at all times during the performance test. You must establish your limestone feeder setting, on a per ton of fired product basis, one week prior to the performance test and maintain

			the feeder setting for the one-week period that precedes the performance test and during the performance test.
	c. Document the source and grade of limestone used	Records of limestone purchase	
5. Tunnel kiln equipped with a DIFF or DLS/FF	Establish the operating limit for the lime feeder setting	Data from the lime feeder during the HF/HCl/Cl ₂ performance test	For continuous lime injection systems, you must ensure that lime in the feed hopper or silo and to the APCD is free-flowing at all times during the performance test and record the feeder setting, on a per ton of fired product basis, for the three test runs. If the feed rate setting varies during the three test runs, determine and record the average feed rate from the three test runs. The average of the three test runs establishes your minimum site-specific feed rate operating limit.
6. Tunnel kiln equipped with a WS	a. Establish the operating limit for the average scrubber liquid pH	Data from the pH measurement device during the performance HF/HCl/Cl ₂ performance test	You must continuously measure the scrubber liquid pH, determine and record the block average pH values for the three test runs, and determine and record the 3-hour block average of the recorded pH measurements for the three test runs. The average of the three test runs establishes your minimum site-specific liquid pH operating limit.
	b. Establish the operating limit for the average scrubber liquid flow rate	Data from the flow rate measurement device during the HF/HCl/Cl ₂ and PM/non-Hg HAP metals performance tests	You must continuously measure the scrubber liquid flow rate, determine and record the block average flow rate values for the three test runs, and determine and record the 3-hour block average of the recorded flow rate measurements for the three test runs. The average of the three test runs establishes your minimum site-specific liquid flow rate operating level. If different average wet scrubber liquid flow rate values are measured during the HF/HCl/Cl ₂ and PM/non-Hg HAP metals tests, the highest of the average values become your site-specific operating limit.

7. Tunnel kiln equipped with an ACI system	Establish the operating limit for the average carbon flow rate	Data from the carbon flow rate measurement conducted during the Hg performance test	You must measure the carbon flow rate during each test run, determine and record the block average carbon flow rate values for the three test runs, and determine and record the 3-hour block average of the recorded carbon flow rate measurements for the three test runs. The average of the three test runs establishes your minimum site-specific activated carbon flow rate operating limit.
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ATTACHMENT 7

Table 5 to Subpart JJJJJ of Part 63— Initial Compliance With Emission Limitations and Work Practice Standards

Table 5 to Subpart JJJJ of Part 63—Initial Compliance With Emission Limitations and Work Practice Standards

As stated in §63.8455, you must demonstrate initial compliance with each emission limitation and work practice standard that applies to you according to the following table:

For each . . .	For the following . . .	You have demonstrated initial compliance if . . .
1. Collection of all tunnel kilns at the facility, including all process streams	a. HF, HCl, and Cl ₂ emissions must not exceed 26 kg/hr (57 lb/hr) HCl equivalent	i. You measure HF, HCl, and Cl ₂ emissions for each kiln using Method 26 or 26A of 40 CFR part 60, appendix A-8 or its alternative, ASTM D6735-01 (Reapproved 2009) (incorporated by reference, see §63.14); or Method 320 of appendix A of this part or its alternative, ASTM D6348-03 (Reapproved 2010) (incorporated by reference, see §63.14); and
		ii. You calculate the HCl-equivalent emissions for each kiln using Equation 2 to this subpart; and
		iii. You sum the HCl-equivalent values for all kilns at the facility using Equation 3 to this subpart; and
		iv. The facility total HCl-equivalent does not exceed 26 kg/hr (57 lb/hr).
2. Existing large tunnel kiln (design capacity ≥10 tph of fired product), including all process streams	a. PM emissions must not exceed 0.018 kg/Mg (0.036 lb/ton) of fired product or 6.6 mg/dscm (0.0029 gr/dscf) at 17% O ₂ ; or	i. The PM emissions measured using Method 5 of 40 CFR part 60, appendix A-3 or Method 29 of 40 CFR part 60, appendix A-8, over the period of the initial performance test, according to the calculations in §63.8445(f)(1), do not exceed 0.018 kg/Mg (0.036 lb/ton) of fired product or 6.6 mg/dscm (0.0029 gr/dscf) at 17% O ₂ ; and
		ii. You establish and have a record of the applicable operating limits listed in Table 2 to this subpart over the 3-hour performance test during which PM emissions did not exceed 0.018 kg/Mg (0.036 lb/ton) of fired product or 6.6 mg/dscm (0.0029 gr/dscf) at 17% O ₂ .
	b. Non-Hg HAP metals emissions must not exceed 0.0026 kg/hr (0.0057 lb/hr)	i. The non-Hg HAP metals emissions measured using Method 29 of 40 CFR part 60, appendix A-8, over the period of the initial performance test, do not exceed 0.0026 kg/hr (0.0057 lb/hr); and
		ii. You establish and have a record of the applicable operating limits listed in Table 2 to this subpart over the 3-hour performance test during which non-Hg HAP metals emissions did not exceed 0.0026 kg/hr (0.0057 lb/hr).
	c. Hg emissions must not exceed 2.1 E-05 kg/Mg (4.1 E-05 lb/ton) of fired product or 7.7 µg/dscm at 17% O ₂ or 2.5 E-04 kg/hr (5.5 E-04 lb/hr)	i. The Hg emissions measured using Method 29 of 40 CFR part 60, appendix A-8 or its alternative, ASTM D6784-02 (Reapproved 2008) (incorporated by reference, see §63.14), over the period of the initial performance test, do not exceed 2.1 E-05 kg/Mg (4.1 E-05 lb/ton) of fired

		product or 7.7 µg/dscm at 17% O ₂ or 2.5 E-04 kg/hr (5.5 E-04 lb/hr); and
		ii. You establish and have a record of the applicable operating limits listed in Table 2 to this subpart over the 3-hour performance test during which Hg emissions did not exceed 2.1 E-05 kg/Mg (4.1 E-05 lb/ton) of fired product or 7.7 µg/dscm at 17% O ₂ or 2.5 E-04 kg/hr (5.5 E-04 lb/hr).
3. Existing small tunnel kiln (design capacity <10 tph of fired product), including all process streams	a. PM emissions must not exceed 0.19 kg/Mg (0.37 lb/ton) of fired product or 4.8 mg/dscm (0.0021 gr/dscf) at 17% O ₂ ; or	i. The PM emissions measured using Method 5 of 40 CFR part 60, appendix A-3 or Method 29 of 40 CFR part 60, appendix A-8, over the period of the initial performance test, according to the calculations in §63.8445(f)(1), do not exceed 0.19 kg/Mg (0.37 lb/ton) of fired product or 4.8 mg/dscm (0.0021 gr/dscf) at 17% O ₂ ; and
		ii. You establish and have a record of the applicable operating limits listed in Table 2 to this subpart over the 3-hour performance test during which PM emissions did not exceed 0.19 kg/Mg (0.37 lb/ton) of fired product or 4.8 mg/dscm (0.0021 gr/dscf) at 17% O ₂ .
	b. Non-Hg HAP metals emissions must not exceed 0.047 kg/hr (0.11 lb/hr)	i. The non-Hg HAP metals emissions measured using Method 29 of 40 CFR part 60, appendix A-8, over the period of the initial performance test, do not exceed 0.047 kg/hr (0.11 lb/hr); and
		ii. You establish and have a record of the applicable operating limits listed in Table 2 to this subpart over the 3-hour performance test during which non-Hg HAP metals emissions did not exceed 0.047 kg/hr (0.11 lb/hr).
	c. Hg emissions must not exceed 1.7 E-04 kg/Mg (3.3 E-04 lb/ton) of fired product or 91 µg/dscm at 17% O ₂ or 8.5 E-04 kg/hr (0.0019 lb/hr)	i. The Hg emissions measured using Method 29 of 40 CFR part 60, appendix A-8 or its alternative, ASTM D6784-02 (Reapproved 2008) (incorporated by reference, see §63.14), over the period of the initial performance test, do not exceed 1.7 E-04 kg/Mg (3.3 E-04 lb/ton) of fired product or 91 µg/dscm at 17% O ₂ or 8.5 E-04 kg/hr (0.0019 lb/hr); and
		ii. You establish and have a record of the applicable operating limits listed in Table 2 to this subpart over the 3-hour performance test during which Hg emissions did not exceed 1.7 E-04 kg/Mg (3.3 E-04 lb/ton) of fired product or 91 µg/dscm at 17% O ₂ or 8.5 E-04 kg/hr (0.0019 lb/hr).
4. New or reconstructed large tunnel kiln (design capacity ≥10 tph of fired product), including all process streams	a. PM emissions must not exceed 0.0089 kg/Mg (0.018 lb/ton) of fired product or 3.2 mg/dscm (0.0014 gr/dscf) at 17% O ₂ ; or	i. The PM emissions measured using Method 5 of 40 CFR part 60, appendix A-3, over the period of the initial performance test, according to the calculations in §63.8445(f)(1), do not exceed 0.0089 kg/Mg (0.018 lb/ton) of fired product or 3.2 mg/dscm (0.0014 gr/dscf) at 17% O ₂ ; and

		ii. You establish and have a record of the applicable operating limits listed in Table 2 to this subpart over the 3-hour performance test during which PM emissions did not exceed 0.0089 kg/Mg (0.018 lb/ton) of fired product or 3.2 mg/dscm (0.0014 gr/dscf) at 17% O ₂ .
	b. Non-Hg HAP metals emissions must not exceed 0.0026 kg/hr (0.0057 lb/hr)	i. The non-Hg HAP metals emissions measured using Method 29 of 40 CFR part 60, appendix A-8, over the period of the initial performance test, do not exceed 0.0026 kg/hr (0.0057 lb/hr); and
		ii. You establish and have a record of the applicable operating limits listed in Table 2 to this subpart over the 3-hour performance test during which non-Hg HAP metals emissions did not exceed 0.0026 kg/hr (0.0057 lb/hr).
	c. Hg emissions must not exceed 1.4 E-05 kg/Mg (2.8 E-05 lb/ton) of fired product or 6.2 µg/dscm at 17% O ₂ or 1.6 E-04 kg/hr (3.4 E-04 lb/hr)	i. The Hg emissions measured using Method 29 of 40 CFR part 60, appendix A-8 or its alternative, ASTM D6784-02 (Reapproved 2008) (incorporated by reference, see §63.14), over the period of the initial performance test, do not exceed 1.4 E-05 kg/Mg (2.8 E-05 lb/ton) of fired product or 6.2 µg/dscm at 17% O ₂ or 1.6 E-04 kg/hr (3.4 E-04 lb/hr); and
		ii. You establish and have a record of the applicable operating limits listed in Table 2 to this subpart over the 3-hour performance test during which Hg emissions did not exceed 1.4 E-05 kg/Mg (2.8 E-05 lb/ton) of fired product or 6.2 µg/dscm at 17% O ₂ or 1.6 E-04 kg/hr (3.4 E-04 lb/hr).
5. New or reconstructed small tunnel kiln (design capacity <10 tph of fired product), including all process streams	a. PM emissions must not exceed 0.015 kg/Mg (0.030 lb/ton) of fired product or 4.7 mg/dscm (0.0021 gr/dscf) at 17% O ₂ ; or	i. The PM emissions measured using Method 5 of 40 CFR part 60, appendix A-3, over the period of the initial performance test, according to the calculations in §63.8445(f)(1), do not exceed 0.015 kg/Mg (0.030 lb/ton) of fired product or 4.7 mg/dscm (0.0021 gr/dscf) at 17% O ₂ ; and
		ii. You establish and have a record of the applicable operating limits listed in Table 2 to this subpart over the 3-hour performance test during which PM emissions did not exceed 0.015 kg/Mg (0.030 lb/ton) of fired product or 4.7 mg/dscm (0.0021 gr/dscf) at 17% O ₂ .
	b. Non-Hg HAP metals emissions must not exceed 0.047 kg/hr (0.11 lb/hr)	i. The non-Hg HAP metals emissions measured using Method 29 of 40 CFR part 60, appendix A-8, over the period of the initial performance test, do not exceed 0.047 kg/hr (0.11 lb/hr); and
		ii. You establish and have a record of the applicable operating limits listed in Table 2 to this subpart over the 3-hour performance test during which non-Hg HAP metals emissions did not exceed 0.047 kg/hr (0.11 lb/hr).

	c. Hg emissions must not exceed 1.7 E-04 kg/Mg (3.3 E-04 lb/ton) of fired product or 91 µg/dscm at 17% O ₂ or 8.5 E-04 kg/hr (0.0019 lb/hr)	i. The Hg emissions measured using Method 29 of 40 CFR part 60, appendix A-8 or its alternative, ASTM D6784-02 (Reapproved 2008) (incorporated by reference, see §63.14), over the period of the initial performance test, do not exceed 1.7 E-04 kg/Mg (3.3 E-04 lb/ton) of fired product or 91 µg/dscm at 17% O ₂ or 8.5 E-04 kg/hr (0.0019 lb/hr); and
		ii. You establish and have a record of the applicable operating limits listed in Table 2 to this subpart over the 3-hour performance test during which Hg emissions did not exceed 1.7 E-04 kg/Mg (3.3 E-04 lb/ton) of fired product or 91 µg/dscm at 17% O ₂ or 8.5 E-04 kg/hr (0.0019 lb/hr).
6. Existing, new or reconstructed periodic kiln	a. Minimize HAP emissions	i. Develop a designed firing time and temperature cycle for each periodic kiln. You must either program the time and temperature cycle into your kiln or track each step on a log sheet; and
		ii. Label each periodic kiln with the maximum load (in tons) of product that can be fired in the kiln during a single firing cycle; and
		iii. Develop maintenance procedures for each kiln that, at a minimum, specify the frequency of inspection and maintenance of temperature monitoring devices, controls that regulate air-to-fuel ratios, and controls that regulate firing cycles.
7. Existing, new or reconstructed tunnel kiln	a. Minimize dioxin/furan emissions	i. Conduct initial inspection of the burners and associated combustion controls (as applicable); and
		ii. Tune the specific burner type to optimize combustion.

ATTACHMENT 8

Table 6 to Subpart JJJJJ of Part 63— Continuous Compliance With Emission Limitations and Work Practice Standards

Table 6 to Subpart JJJJJ of Part 63—Continuous Compliance With Emission Limitations and Work Practice Standards

As stated in §63.8470, you must demonstrate continuous compliance with each emission limitation and work practice standard that applies to you according to the following table:

For each . . .	For the following . . .	You must demonstrate continuous compliance by . . .
1. Tunnel kiln equipped with a DLA	a. Each emission limit in Table 1 to this subpart and each operating limit in Item 1 of Table 2 to this subpart for tunnel kilns equipped with a DLA	i. Collecting the DLA pressure drop data according to §63.8450(a); reducing the DLA pressure drop data to 3-hour block averages according to §63.8450(a); maintaining the average pressure drop across the DLA for each 3-hour block period at or above the average pressure drop established during the HF/HCl/Cl ₂ performance test in which compliance was demonstrated; or continuously monitoring the bypass stack damper position at least once every 15 minutes during normal kiln operation, and initiating corrective action within 1 hour after the bypass damper is opened allowing the kiln exhaust gas to bypass the DLA and completing corrective action in accordance with your OM&M plan; and
		ii. Verifying that the limestone hopper and storage bin (located at the top of the DLA) contain adequate limestone by performing a daily visual check, which could include one of the following: (1) Conducting a physical check of the hopper; (2) creating a visual access point, such as a window, on the side of the hopper; (3) installing a camera in the hopper that provides continuous feed to a video monitor in the control room; or (4) confirming that load level indicators in the hopper are not indicating the need for additional limestone; and
		iii. Recording the limestone feeder setting daily (on a per ton of fired product basis) to verify that the feeder setting is being maintained at or above the level established during the HF/HCl/Cl ₂ performance test in which compliance was demonstrated; and
		iv. Using the same grade of limestone from the same source as was used during the HF/HCl/Cl ₂ performance test; maintaining records of the source and type of limestone; and
		v. Performing VE observations of the DLA stack at the frequency specified in §63.8470(e) using Method 22 of 40 CFR part 60, appendix A-7; maintaining no VE from the DLA stack.
2. Tunnel kiln equipped with a DIFF or DLS/FF	a. Each emission limit in Table 1 to this subpart and each operating limit in Item 2 of Table 2 to this subpart for tunnel kilns equipped with DIFF or DLS/FF	i. If you use a bag leak detection system, as prescribed in §63.8450(e), initiating corrective action within 1 hour of a bag leak detection system alarm and completing corrective actions in accordance with your OM&M plan; operating and maintaining the fabric filter such that the alarm is not engaged for more than 5 percent of the total operating time in a 6-month block reporting period; in calculating this operating time fraction, if inspection of the fabric filter demonstrates that no corrective action is

		required, no alarm time is counted; if corrective action is required, each alarm is counted as a minimum of 1 hour; if you take longer than 1 hour to initiate corrective action, the alarm time is counted as the actual amount of time taken by you to initiate corrective action; or performing VE observations of the DIFF or DLS/FF stack at the frequency specified in §63.8470(e) using Method 22 of 40 CFR part 60, appendix A-7; and maintaining no VE from the DIFF or DLS/FF stack; and
		ii. Verifying that lime is free-flowing via a load cell, carrier gas/lime flow indicator, carrier gas pressure drop measurement system, or other system; recording all monitor or sensor output, and if lime is found not to be free flowing, promptly initiating and completing corrective actions in accordance with your OM&M plan; recording the feeder setting once during each shift of operation to verify that the feeder setting is being maintained at or above the level established during the HF/HCl/Cl ₂ performance test in which compliance was demonstrated.
3. Tunnel kiln equipped with a WS	a. Each emission limit in Table 1 to this subpart and each operating limit in Item 3 of Table 2 to this subpart for tunnel kilns equipped with WS	i. Collecting the scrubber liquid pH data according to §63.8450(a); reducing the scrubber liquid pH data to 3-hour block averages according to §63.8450(a); maintaining the average scrubber liquid pH for each 3-hour block period at or above the average scrubber liquid pH established during the HF/HCl/Cl ₂ performance test in which compliance was demonstrated; and
		ii. Collecting the scrubber liquid flow rate data according to §63.8450(a); reducing the scrubber liquid flow rate data to 3-hour block averages according to §63.8450(a); maintaining the average scrubber liquid flow rate for each 3-hour block period at or above the highest average scrubber liquid flow rate established during the HF/HCl/Cl ₂ and PM/non-Hg HAP metals performance tests in which compliance was demonstrated.
4. Tunnel kiln equipped with an ACI system	Each emission limit in Table 1 to this subpart and each operating limit in Item 4 of Table 2 to this subpart for tunnel kilns equipped with ACI system	Collecting the carbon flow rate data according to §63.8450(a); reducing the carbon flow rate data to 3-hour block averages according to §63.8450(a); maintaining the average carbon flow rate for each 3-hour block period at or above the average carbon flow rate established during the Hg performance test in which compliance was demonstrated.
5. Tunnel kiln with no add-on control	a. Each emission limit in Table 1 to this subpart and each operating limit in Item 5 of Table 2 to this subpart for tunnel kilns with no add-on control	i. Performing VE observations of the stack at the frequency specified in §63.8470(e) using Method 22 of 40 CFR part 60, appendix A-7; and maintaining no VE from the stack.
		ii. If your last calculated total facility maximum potential HCl-equivalent was not at or below the health-based standard in Table 1 to this subpart, collecting the kiln process rate data according to §63.8450(a); reducing the kiln process rate data to 3-hour block averages according to §63.8450(a); maintaining the

		average kiln process rate for each 3-hour block period at or below the kiln process rate determined according to §63.8445(g)(1).
6. Periodic kiln	a. Minimize HAP emissions	i. Using a designed firing time and temperature cycle for each periodic kiln; and
		ii. For each firing load, documenting the total tonnage of product placed in the kiln to ensure that it is not greater than the maximum load identified in Item 1.a.ii of Table 3 to this subpart; and
		iii. Following maintenance procedures for each kiln that, at a minimum, specify the frequency of inspection and maintenance of temperature monitoring devices, controls that regulate air-to-fuel ratios, and controls that regulate firing cycles; and
		iv. Developing and maintaining records for each periodic kiln, as specified in §63.8490.
7. Tunnel kiln	a. Minimize dioxin/furan emissions	i. Maintaining and inspecting the burners and associated combustion controls (as applicable) and tuning the specific burner type to optimize combustion no later than 36 calendar months after the previous tune-up; and
		ii. Maintaining records of burner tune-ups used to demonstrate compliance with the dioxin/furan work practice standard; and
		iii. Submitting a report of most recent tune-up conducted with compliance report.

ATTACHMENT 9

Table 7 to Subpart JJJJJ of Part 63— Compliance Dates

Table 7 to Subpart JJJJJ of Part 63—Compliance Dates

As stated in §63.8395, you must meet each compliance date in the following table that applies to you:

If you have a(n) . . .	Then you must . . .	No later than . . .
1. New or reconstructed affected source and the initial startup of your affected source is after December 18, 2014, but before December 28, 2015	Comply with the applicable emission limitations and work practice standards in Tables 1, 2, and 3 to this subpart	December 28, 2015.
2. New or reconstructed affected source and the initial startup of your affected source is after December 28, 2015	Comply with the applicable emission limitations and work practice standards in Tables 1, 2, and 3 to this subpart	Initial startup of your affected source.
3. Existing affected source	Comply with the applicable emission limitations and work practice standards in Tables 1, 2, and 3 to this subpart	December 26, 2018.
4. Existing area source that increases its emissions or its potential to emit such that it becomes a major source of HAP by adding a new affected source or by reconstructing	Be in compliance with this subpart	Initial startup of your affected source as a major source.
5. New area source (<i>i.e.</i> , an area source for which construction or reconstruction commenced after December 18, 2014) that increases its emissions or its potential to emit such that it becomes a major source of HAP	Be in compliance with this subpart	Initial startup of your affected source as a major source.

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ATTACHMENT 10

Table 8 to Subpart JJJJJ of Part 63— Deadlines for Submitting Notifications

Table 8 to Subpart JJJJJ of Part 63—Deadlines for Submitting Notifications

As stated in §63.8480, you must submit each notification that applies to you according to the following table:

If you . . .	You must . . .	No later than . . .	As specified in . . .
1. Start up your affected source before December 28, 2015	Submit an Initial Notification	June 22, 2016	§63.9(b)(2).
2. Start up your new or reconstructed affected source on or after December 28, 2015	Submit an Initial Notification	120 calendar days after you become subject to this subpart	§63.9(b)(2).
3. Are required to conduct a performance test	Submit a notification of intent to conduct a performance test	60 calendar days before the performance test is scheduled to begin	§63.7(b)(1).
4. Are required to conduct a compliance demonstration that includes a performance test according to the requirements in Table 4 to this subpart	Submit a Notification of Compliance Status, including the performance test results	60 calendar days following the completion of the performance test, by the close of business	§63.9(h) and §63.10(d)(2).
5. Are required to conduct a compliance demonstration required in Table 5 to this subpart that does not include a performance test (<i>i.e.</i> , compliance demonstrations for the work practice standards)	Submit a Notification of Compliance Status	30 calendar days following the completion of the compliance demonstrations, by the close of business	§63.9(h).
6. Request to use the routine control device maintenance alternative standard according to §63.8420(d)	Submit your request	120 calendar days before the compliance date specified in §63.8395	

ATTACHMENT 11

Table 9 to Subpart JJJJJ of Part 63— Requirements for Reports

Table 9 to Subpart JJJJJ of Part 63—Requirements for Reports

As stated in §63.8485, you must submit each report that applies to you according to the following table:

You must submit . . .	The report must contain . . .	You must submit the report . . .
1. A compliance report.	a. If there are no deviations from any emission limitations (emission limits, operating limits) that apply to you, a statement that there were no deviations from the emission limitations during the reporting period. If there were no periods during which the CMS was out-of-control as specified in your OM&M plan, a statement that there were no periods during which the CMS was out-of-control during the reporting period	Semiannually according to the requirements in §63.8485(b).
	b. If you have a deviation from any emission limitation (emission limit, operating limit) during the reporting period, the report must contain the information in §63.8485(c)(9). If there were periods during which the CMS was out-of-control, as specified in your OM&M plan, the report must contain the information in §63.8485(d)	Semiannually according to the requirements in §63.8485(b).

ATTACHMENT 12

Table 10 to Subpart JJJJJ of Part 63— Applicability of General Provisions to Subpart JJJJJ

Table 10 to Subpart JJJJJ of Part 63—Applicability of General Provisions to Subpart JJJJJ

As stated in §63.8505, you must comply with the General Provisions in §§63.1 through 63.16 that apply to you according to the following table:

Citation	Subject	Brief description	Applies to subpart JJJJJ?
§63.1	Applicability	Initial applicability determination; applicability after standard established; permit requirements; extensions, notifications	Yes.
§63.2	Definitions	Definitions for part 63 standards	Yes.
§63.3	Units and Abbreviations	Units and abbreviations for part 63 standards	Yes.
§63.4	Prohibited Activities	Compliance date; circumvention; severability	Yes.
§63.5	Construction/Reconstruction	Applicability; applications; approvals	Yes.
§63.6(a)	Applicability	General Provisions (GP) apply unless compliance extension; GP apply to area sources that become major	Yes.
§63.6(b)(1)-(4)	Compliance Dates for New and Reconstructed sources	Standards apply at effective date; 3 years after effective date; upon startup; 10 years after construction or reconstruction commences for section 112(f)	Yes.
§63.6(b)(5)	Notification	Must notify if commenced construction or reconstruction after proposal	Yes.
§63.6(b)(6)	[Reserved]		No.
§63.6(b)(7)	Compliance Dates for New and Reconstructed Area Sources That Become Major	Area sources that become major must comply with major source standards immediately upon becoming major, regardless of whether required to comply when they were area sources	Yes.
§63.6(c)(1)-(2)	Compliance Dates for Existing Sources	Comply according to date in subpart, which must be no later than 3 years after effective date; for section 112(f) standards, comply within 90 calendar days of effective date unless compliance extension	Yes.
§63.6(c)(3)-(4)	[Reserved]		No.
§63.6(c)(5)	Compliance Dates for Existing Area Sources That Become Major	Area sources that become major must comply with major source standards by date indicated in subpart or by equivalent time period (for example, 3 years)	Yes.
§63.6(d)	[Reserved]		No.
§63.6(e)(1)(i)	Operation & Maintenance	General Duty to minimize emissions	No. See §63.8420(b) for general duty requirement.
§63.6(e)(1)(ii)	Operation & Maintenance	Requirement to correct malfunctions ASAP	No.
§63.6(e)(1)(iii)	Operation & Maintenance	Operation and maintenance requirements enforceable independent of emissions	Yes.

		limitations	
§63.6(e)(2)	[Reserved]		No.
§63.6(e)(3)	Startup, Shutdown, and Malfunction Plan (SSMP)	Requirement for startup, shutdown, and malfunction (SSM) and SSMP; content of SSMP	No.
§63.6(f)(1)	Compliance Except During SSM	You must comply with emission standards at all times except during SSM	No.
§63.6(f)(2)-(3)	Methods for Determining Compliance	Compliance based on performance test, operation and maintenance plans, records, inspection	Yes.
§63.6(g)	Alternative Standard	Procedures for getting an alternative standard	Yes.
§63.6(h)	Opacity/VE Standards	Requirements for opacity and VE standards	No, not applicable.
§63.6(i)	Compliance Extension	Procedures and criteria for Administrator to grant compliance extension	Yes.
§63.6(j)	Presidential Compliance Exemption	President may exempt source category	Yes.
§63.7(a)(1)-(2)	Performance Test Dates	Dates for conducting initial performance testing and other compliance demonstrations for emission limits and work practice standards; must conduct 180 calendar days after first subject to rule	Yes.
§63.7(a)(3)	Section 114 Authority	Administrator may require a performance test under CAA section 114 at any time	Yes.
§63.7(a)(4)	Notification of Delay in Performance Testing Due To Force Majeure	Must notify Administrator of delay in performance testing due to force majeure	Yes.
§63.7(b)(1)	Notification of Performance Test	Must notify Administrator 60 calendar days before the test	Yes.
§63.7(b)(2)	Notification of Rescheduling	Must notify Administrator 5 calendar days before scheduled date of rescheduled date	Yes.
§63.7(c)	Quality Assurance(QA)/Test Plan	Requirements; test plan approval procedures; performance audit requirements; internal and external QA procedures for testing	Yes.
§63.7(d)	Testing Facilities	Requirements for testing facilities	Yes.
§63.7(e)(1)	Conditions for Conducting Performance Tests	Cannot conduct performance tests during SSM; not a violation to exceed standard during SSM	No, §63.8445 specifies requirements.
§63.7(e)(2)-(3)	Conditions for Conducting Performance Tests	Must conduct according to subpart and EPA test methods unless Administrator approves alternative; must have at least three test runs of at least 1 hour each; compliance is based on arithmetic mean of three runs; conditions when data from an additional test run can be used	Yes.

§63.7(e)(4)	Testing under Section 114	Administrator's authority to require testing under section 114 of the Act	Yes.
§63.7(f)	Alternative Test Method	Procedures by which Administrator can grant approval to use an alternative test method	Yes.
§63.7(g)	Performance Test Data Analysis	Must include raw data in performance test report; must submit performance test data 60 calendar days after end of test with the notification of compliance status	Yes.
§63.7(h)	Waiver of Tests	Procedures for Administrator to waive performance test	Yes.
§63.8(a)(1)	Applicability of Monitoring Requirements	Subject to all monitoring requirements in subpart	Yes.
§63.8(a)(2)	Performance Specifications	Performance Specifications in appendix B of 40 CFR part 60 apply	Yes.
§63.8(a)(3)	[Reserved]		No.
§63.8(a)(4)	Monitoring with Flares	Requirements for flares in §63.11 apply	No, not applicable.
§63.8(b)(1)	Monitoring	Must conduct monitoring according to standard unless Administrator approves alternative	Yes.
§63.8(b)(2)-(3)	Multiple Effluents and Multiple Monitoring Systems	Specific requirements for installing and reporting on monitoring systems	Yes.
§63.8(c)(1)	Monitoring System Operation and Maintenance	Maintenance consistent with good air pollution control practices	Yes.
§63.8(c)(1)(i)	Routine and Predictable SSM	Reporting requirements for SSM when action is described in SSMP	No.
§63.8(c)(1)(ii)	SSM not in SSMP	Reporting requirements for SSM when action is not described in SSMP	Yes.
§63.8(c)(1)(iii)	Compliance with Operation and Maintenance Requirements	How Administrator determines if source complying with operation and maintenance requirements	No.
§63.8(c)(2)-(3)	Monitoring System Installation	Must install to get representative emission and parameter measurements	Yes.
§63.8(c)(4)	CMS Requirements	Requirements for CMS	No, §63.8450 specifies requirements.
§63.8(c)(5)	Continuous Opacity Monitoring System (COMS) Minimum Procedures	COMS minimum procedures	No, not applicable.
§63.8(c)(6)	CMS Requirements	Zero and high level calibration check requirements	Yes.
§63.8(c)(7)-(8)	CMS Requirements	Out-of-control periods	Yes.
§63.8(d)(1) and (2)	CMS Quality Control	Requirements for CMS quality control	Yes.
§63.8(d)(3)	CMS Quality Control	Written procedures for CMS	No, §63.8425(b)(9) specifies requirements
§63.8(e)	CMS Performance Evaluation	Requirements for CMS performance	Yes.

		evaluation	
§63.8(f)(1)-(5)	Alternative Monitoring Method	Procedures for Administrator to approve alternative monitoring	Yes.
§63.8(f)(6)	Alternative to Relative Accuracy Test	Procedures for Administrator to approve alternative relative accuracy test for continuous emissions monitoring systems (CEMS)	No, not applicable.
§63.8(g)	Data Reduction	COMS and CEMS data reduction requirements	No, not applicable.
§63.9(a)	Notification Requirements	Applicability; State delegation	Yes.
§63.9(b)	Initial Notifications	Requirements for initial notifications	
§63.9(c)	Request for Compliance Extension	Can request if cannot comply by date or if installed BACT/LAER	Yes.
§63.9(d)	Notification of Special Compliance Requirements for New Source	For sources that commence construction between proposal and promulgation and want to comply 3 years after effective date	Yes.
§63.9(e)	Notification of Performance Test	Notify Administrator 60 calendar days prior	Yes.
§63.9(f)	Notification of VE/Opacity Test	Notify Administrator 30 calendar days prior	No, not applicable.
§63.9(g)(1)	Additional Notifications When Using CMS	Notification of performance evaluation	Yes.
§63.9(g)(2)-(3)	Additional Notifications When Using CMS	Notification of COMS data use; notification that relative accuracy alternative criterion were exceeded	No, not applicable.
§63.9(h)	Notification of Compliance Status	Contents; submittal requirements	Yes.
§63.9(i)	Adjustment of Submittal Deadlines	Procedures for Administrator to approve change in when notifications must be submitted	Yes.
§63.9(j)	Change in Previous Information	Must submit within 15 calendar days after the change	Yes.
§63.10(a)	Recordkeeping/Reporting	Applicability; general information	Yes.
§63.10(b)(1)	General Recordkeeping Requirements	General requirements	Yes.
§63.10(b)(2)(i)	Records Related to SSM	Recordkeeping of occurrence and duration of startups and shutdowns	No.
§63.10(b)(2)(ii)	Records Related to SSM	Recordkeeping of failures to meet a standard	No. See §63.8490(c)(2) for recordkeeping of (1) date, time and duration; (2) listing of affected source or equipment, and an estimate of the volume of each regulated pollutant emitted over the standard; and (3) actions to minimize emissions and correct the failure.
§63.10(b)(2)(iii)	Records Related to SSM	Maintenance records	
§63.10(b)(2)(iv)-	Records Related to SSM	Actions taken to minimize emissions	No.

(v)		during SSM	
§63.10(b)(2)(vi)-(xii) and (xiv)	CMS Records	Records when CMS is malfunctioning, inoperative or out-of-control	Yes.
§63.10(b)(2)(xiii)	Records	Records when using alternative to relative accuracy test	
§63.10(b)(3)	Records	Applicability Determinations	Yes.
§63.10(c)(1)-(15)	Records	Additional records for CMS	No, §§63.8425 and 63.8490 specify requirements
§63.10(d)(1) and (2)	General Reporting Requirements	Requirements for reporting; performance test results reporting	Yes.
§63.10(d)(3)	Reporting Opacity or VE Observations	Requirements for reporting opacity and VE	No, not applicable.
§63.10(d)(4)	Progress Reports	Must submit progress reports on schedule if under compliance extension	Yes.
§63.10(d)(5)	SSM Reports	Contents and submission.	No. See §63.8485(c)(9) for malfunction reporting requirements.
§63.10(e)(1)-(3)	Additional CMS Reports	Requirements for CMS reporting	No, §§63.8425 and 63.8485 specify requirements.
§63.10(e)(4)	Reporting COMS data	Requirements for reporting COMS data with performance test data	No, not applicable.
§63.10(f)	Waiver for Recordkeeping/Reporting	Procedures for Administrator to waive	Yes.
§63.11	Flares	Requirement for flares	No, not applicable.
§63.12	Delegation	State authority to enforce standards	
§63.13	Addresses	Addresses for reports, notifications, requests	Yes.
§63.14	Incorporation by Reference	Materials incorporated by reference	Yes.
§63.15	Availability of Information	Information availability; confidential information	Yes.
§63.16	Performance Track Provisions	Requirements for Performance Track member facilities	Yes.

ATTACHMENT 13

Definitions that apply to 40 CFR Subpart JJJJJ of Part 63

40 CFR 63.8515 What definitions apply to 40 CFR part 63 subpart JJJJJ?

Terms used in 40 CFR part 63 subpart JJJJJ are defined in the Clean Air Act, in 40 CFR 63.2, and in this section as follows:

Air pollution control device (APCD) means any equipment that reduces the quantity of a pollutant that is emitted to the air.

Bag leak detection system means an instrument that is capable of monitoring PM loadings in the exhaust of a fabric filter in order to detect bag failures. A bag leak detection system includes, but is not limited to, an instrument that operates on triboelectric, light-scattering, light-transmittance, or other effects to monitor relative PM loadings.

Brick and structural clay products (BSCP) manufacturing facility means a plant site that manufactures brick (including, but not limited to, face brick, structural brick, and brick pavers); clay pipe; roof tile; extruded floor and wall tile; and/or other extruded, dimensional clay products. Brick and structural clay products manufacturing facilities typically process raw clay and shale, form the processed materials into bricks or shapes, and dry and fire the bricks or shapes. A plant site that manufactures refractory products, as defined in 40 CFR 63.9824, or clay ceramics, as defined in 40 CFR 63.8665, is not a BSCP manufacturing facility.

Deviation means any instance in which an affected source subject to 40 CFR part 63 subpart JJJJJ, or an owner or operator of such a source:

- (1) Fails to meet any requirement or obligation established by 40 CFR part 63 subpart JJJJJ including, but not limited to, any emission limitation (including any operating limit) or work practice standard; or
- (2) Fails to meet any term or condition that is adopted to implement an applicable requirement in 40 CFR part 63 subpart JJJJJ for any affected source required to obtain such a permit.

Dry lime injection fabric filter (DIFF) means an APCD that includes continuous injection of hydrated lime or other sorbent into a duct or reaction chamber followed by a fabric filter.

Dry lime scrubber/fabric filter (DLS/FF) means an APCD that includes continuous injection of humidified hydrated lime or other sorbent into a reaction chamber followed by a fabric filter. These systems typically include recirculation of some of the sorbent.

Dry limestone adsorber (DLA) means an APCD that includes a limestone storage bin, a reaction chamber that is essentially a packed tower filled with limestone, and may or may not include a peeling drum that mechanically scrapes reacted limestone to regenerate the stone for reuse.

Emission limitation means any emission limit or operating limit.

Fabric filter means an APCD used to capture PM by filtering a gas stream through filter media; also known as a baghouse.

Initial startup means:

- (1) For a new or reconstructed tunnel kiln controlled with a DLA, the time at which the temperature in the kiln first reaches 260 °C (500 °F) and the kiln contains product; or
- (2) for a new or reconstructed tunnel kiln controlled with a DIFF, DLS/FF, or wet scrubber (WS), the time at which the kiln first reaches a level of production that is equal to 75 percent of the kiln design capacity or 12 months after the affected source begins firing BSCP, whichever is earlier.

Fired product means brick or structural clay products that have gone through the firing process via kilns.

Kiln exhaust process stream means the portion of the exhaust from a tunnel kiln that exhausts directly to the atmosphere (or to an APCD), rather than to a sawdust dryer.

Large tunnel kiln means a tunnel kiln (existing, new, or reconstructed) with a design capacity equal to or greater than 9.07 Mg/hr (10 tph) of fired product.

Minimum APCD inlet temperature means the minimum temperature that kiln exhaust can be vented to the APCD that ensures the long-term integrity of the APCD.

Particulate matter (PM) means, for purposes of 40 CFR part 63 subpart JJJJ, emissions of PM that serve as a measure of total particulate emissions, as measured by Method 5 (40 CFR part 60, appendix A-3) or Method 29 (40 CFR part 60, appendix A-8), and as a surrogate for non-mercury metal HAP contained in the particulates including, but not limited to, antimony, arsenic, beryllium, cadmium, chromium, cobalt, lead, manganese, nickel, and selenium.

Periodic kiln means a batch firing kiln.

Plant site means all contiguous or adjoining property that is under common control, including properties that are separated only by a road or other public right-of-way. Common control includes properties that are owned, leased, or operated by the same entity, parent entity, subsidiary, or any combination thereof.

Responsible official means responsible official as defined in 40 CFR 70.2.

Small tunnel kiln means a tunnel kiln (existing, new, or reconstructed) with a design capacity less than 9.07 Mg/hr (10 tph) of fired product.

Startup means the setting in operation of an affected source and starting the production process.

Startup push rate means the kiln push rate required to bring the kiln to the proper operating temperature during startup.

Tunnel kiln means any continuous kiln that is used to fire BSCP. Some tunnel kilns have two process streams, including a process stream that exhausts directly to the atmosphere or to an APCD, and a process stream in which the kiln exhaust is ducted to a sawdust dryer where it is used to dry sawdust before being emitted to the atmosphere.

Tunnel kiln design capacity means the maximum amount of brick, in Mg (tons), that a kiln is designed to produce in one year divided by the number of hours in a year (8,760 hours), taking into account the void space in the brick, the push rate for the kiln, and the stacking pattern, if applicable. If a kiln is modified to increase the capacity, the design capacity is considered to be the capacity following modifications.

Wet scrubber (WS) means an APCD that uses water, which may include caustic additives or other chemicals, as the sorbent. Wet scrubbers may use any of various design mechanisms to increase the contact between exhaust gases and the sorbent.

Work practice standard means any design, equipment, work practice, operational standard, or combination thereof, that is promulgated pursuant to section 112(h) of the Clean Air Act.